

DOCUMENT RESUME

ED 210 292

TM 810 936

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TITLE National Evaluation of Head Start Educational Services and Basic Educational Skills Demonstration Programs. Project Report 7: Description and Analysis of Program Data: Head Start Sample Programs. Draft.
INSTITUTION NTS Research Corp., Durham, N.C.
SPONS AGENCY Administration for Children, Youth, and Families (DHEW), Washington, D.C.
PUB DATE 8 Feb 80
CONTRACT NTW-105-78-1306
NOTE 99p.; For related documents, see TM 810 937-942.
EDRS PRICE MF01/PC04 Plus Postage.
DESCRIPTORS Basic Skills; *Compensatory Education; Disadvantaged Youth; Economically Disadvantaged; *Evaluation Methods; *Field Tests; Longitudinal Studies; Parent Participation; Preschool Education; *Preschool Evaluation; Program Descriptions; *Program Evaluation; Program Implementation; Research Design
IDENTIFIERS *Project Head Start

ABSTRACT

The overall purpose of the national Head Start evaluation is to assess the impact, on the children and parents being served, of: (1) the educational services component of Head Start, and (2) a new demonstration program within Head Start, Basic Educational Skills. The evaluation deals with a total of 65 Head Start programs and their families. This longitudinal study will focus on the preschool and elementary experiences of three groups: those in typical Head Start programs, those who are eligible but not enrolled in Head Start, and those who participate in the Basic Educational Skills program. The dominant issue is the relationship between program delivery and program effects on a national scale. Site visits to selected Head Start programs were conducted in spring, 1979. The results of these site visits are reported in terms of determinants of implementation, characteristics of the program and its context, implementation/process variables, curriculum resources, parent involvement, continuity, and opportunity to benefit. Future phases of the evaluation are described. (BW)

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NATIONAL EVALUATION OF HEAD START EDUCATIONAL SERVICES AND
BASIC EDUCATIONAL SKILLS DEMONSTRATION PROGRAMS

D R A F T

Project Report 7: Description and Analysis of Program Data:
Head Start Sample Programs

D R A F T

February 8, 1980

Contract No. HEW-105-78-1306

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This report is one of ten submitted by NTS Research Corporation to the Administration for Children, Youth and Families under Contract No.

HEW-105-78-1306.

- Project Report 1: Design and Sampling
- Project Report 2: Panel Recommendations
- Project Report 3: Child Outcomes: Individual Testing Battery for the Fall 1979 Cohort
- Project Report 4: National Evaluation of Head Start Educational Services and Basic Educational Skills Initiative: Individual Testing Battery for Fall 1979
- Project Report 5: OMB Submission Package
- Project Report 6: Description and Analysis of Program Data: Basic Educational Skills Initiative, 1979
- Project Report 7: Description of Program Data: Head Start Sample Programs, 1979
- Project Report 8: Generalizability Studies of the Child Test Battery and of the Alternative Classroom Environment Scales
- Project Report 9: Procedures in the Implementation of the Study Design, 1978-79
- Project Report 10: Phase II Summary Report: Fall 1979 Child Data Collection

INTRODUCTION TO EVALUATION

Each year Head Start programs serve approximately 385,000 children and families, at a cost of over \$700 million dollars--the largest annual federal expenditure for the education of preschool children. NTS Research Corporation is currently conducting the beginning phases of the largest and potentially most long-term evaluation of Head Start programs yet planned. The overall purpose of this evaluation is to assess the impact, on the children and parents being served, of: (1) the educational services component of Head Start programs nationwide, and (2) a new demonstration program within Head Start, Basic Educational Skills. The evaluation deals with a total of 65 Head Start programs and their families, potentially for 10 to 12 years.

Head Start is a nationwide program for preschool children of low-income families and is supported by the United States Department of Health and Human Services. Since its inception in 1965, the goal of Head Start has been to improve each child's ability to deal both with the present environment in which he/she lives and with later responsibilities in school and life. Head Start provides services not only in the educational area, but also in the areas of health, nutrition, parent involvement and social services. While this is an evaluation of the educational component, the study also gathers information on Head Starts' other components.

The Basic Educational Skills Program is the newest experimental project initiated by Head Start. As stated in the BES Program Guidelines:¹

The purpose of the project is to demonstrate and test effective educational strategies that help young children acquire developmentally appropriate educational skills in a climate that supports physical, intellectual, social, and emotional development. The project links Head Start programs and public schools, together with parents, in a collaborative effort to facilitate the child's learning experiences. The overall objective is to enhance school readiness, later school achievement, and to promote attitudes conducive to life long learning. The specific aim is to try out a variety of educational approaches to increase the child's basic educational skills, with emphasis on learning outcomes in oral language, reading, writing, mathematics, science, problem-solving, and learning attitudes. (Learning attitudes includes self-esteem as a learner, motivation, curiosity, initiative, purposefulness, persistence, task completion, and interest in life-long learning.) (p. 1)

The goals of this project are to examine the effectiveness of a variety of approaches of implementing the four program elements: Curriculum, Parent Involvement, Teacher Attitudes and Behaviors, and Continuity. These program elements have been highlighted by reviews of research and educational practice as among the principal variables that affect children's educational achievement. The principal purpose of the BES field experiment is to determine the contribution of variables associated with the four elements to children's acquisition of basic educational skills. (p. 5)

Individual Head Start programs are operated by local grantees which are community action organizations, public school systems, tribal councils, and other non-profit agencies. Decisions about such issues as staff, curriculum, facilities, and recruitment procedures are made by a local policy council composed of parents and other members of the community. With this kind of local initiative, Head Start programs vary widely from one location to another in the ways in which they deliver services--within the guidelines of performance standards set by the Federal agency which funds and administers the program, the Administration for Children, Youth and Families (ACYF). The national office of

¹Administration for Children, Youth, and Families, Basic Educational Skills Project: A Head Start Research and Demonstration Initiative in Collaboration With the Elementary Schools; Guidelines for Local Head Start Programs and Elementary Schools, March 1979.

ACYF also periodically funds special demonstration programs (such as BES) for the purpose of initiating testing, and disseminating innovative program ideas.

The regional offices of ACYF are responsible for monitoring local program service delivery to ensure that each program meets the required performance standards. Evaluations of Head Start program outcomes are initiated by the national office of ACYF. The evaluations are diverse and include three distinct kinds:

- o Evaluations of the basic National Head Start program, which use representative national samples of about 30 of the total 1,800 programs, and examine the areas of Health Services, Educational Services, Social Services, Parent Involvement, Services to Handicapped Children, Services to Migrant Children, and Staff Training.
- o Evaluations of the Head Start demonstration programs, each of which involve about a dozen sites nationally, including, for example, Project Developmental Continuity, the Child and Family Resource Program, Home Start Training Centers, the Bilingual/Bicultural Curriculum Project, and the BES Project.
- o Projects to develop evaluation measures and methods; for example, the project to translate the ETS CIRCUS preschool test battery into Spanish, and the project to develop a comprehensive set of measures of program effects on preschool children.

This evaluation represents both the first and second categories above; it is a nationwide evaluation of the Educational Services of the basic Head Start Program and the evaluation of the newest Head Start demonstration project, Basic Educational Skills.

ACYF has actively gathered information over the past fifteen years regarding both program delivery and program effects. A unique aspect of the evaluation described in this report is its focus on the relationship between program delivery and program effects on a national scale.

Overview of the Head Start Evaluation Design

This evaluation is a longitudinal study that will follow children and their parents from preschool through the fourth grade. The study focuses on the preschool and elementary experiences of three groups of children and their parents:

- o Those who participate in typical Head Start programs--the Head Start Study Group
- o Those who are eligible for Head Start but who are not enrolled--the Alternative Services (Control) Group
- o Those who participate in the Basic Educational Skills demonstration program--the BES Group

The major evaluation questions to be addressed in this study are as follows:

1. What different types of approaches do Head Start programs use to deliver educational services? How do these approaches differ in BES programs? How do these approaches differ from programs in alternative service settings?
2. How do different program approaches, and ways children and parents partake of the programs, affect the benefits achieved by children and parents?
3. Do children and parents in BES programs benefit more than children and parents in non-BES Head Start programs? Do children and parents in both BES and non-BES Head Start programs benefit more than children and parents in alternative service settings?

The dominant issues contained in this set of questions is a focus on the relationships between program delivery and program effects on a national scale.

As mentioned above, the evaluation is longitudinal and will study children (and their parents) from preschool through the fourth grade. Over the next three years, three cohorts (one small cohort and two full cohorts) of preschool age children will be studied. Each full cohort will be drawn from 16 Basic Educational Skills demonstration programs and from 30 randomly selected Head Start programs and their communities. It will involve 4560 children and their families per cohort: 60 BES children from each BES program, 60 Head Start from each regular Head Start program, and 60 non-Head Start children from each regular Head Start program's community.

The study design is innovative for two reasons. First, it focuses on the relationships between process and outcome variables in preschool settings. Second, it is one of the first preschool field evaluations to incorporate a true experimental design. In those instances in which a participating Head Start program receives applications from more children than it can serve, random assignment of children into the Head Start program and a non-Head Start group will be implemented. The use of this study plan will, hopefully, result in one of the strongest research efforts ever conducted under the auspices of ACYF.

This report, Description and Analysis of Program Data: Head Start Sample Programs, and its companion volume, Description and Analysis of Program Data: Basic Educational Skills Initiative, describe the process data which was collected by NTS in the spring of 1979, during one-week site visits to each of the programs in the evaluation. These data serve as baseline information for the evaluation as well as an initial tryout of the instruments developed by NTS for program process data collection.

Chapter One of this report gives further information about the purpose and background of the evaluation; presents and describes the conceptual framework for the study; and discusses the instruments and data collection procedures used.

Chapter Two describes the procedures used to select the sample of Head Start programs for participation in the study, briefly describes the sample, and compares the sample to information available on the universe of Head Start programs.

Chapter Three presents and discusses the process data obtained on these 30 Head Start programs during 1979.

Chapter Four discusses the relationship of the data reported in this volume to the longitudinal evaluation.

CHAPTER 1

OVERVIEW OF THE EVALUATION DESIGN

Purpose

The National Evaluation of Head Start Educational Services and the Basic Educational Skills Initiative is a combination of two evaluations. The first evaluation focuses on the impact of Head Start educational services on the children and families served by Head Start. The second evaluation focuses on the effectiveness of a new Head Start demonstration program, Basic Educational Skills.

The historical context within which this evaluation is embedded is important as this is the first national evaluation of the educational component of Head Start since the objectives and performance standards were implemented at the local level. A brief review of the history of Head Start evaluation follows.

Background for the Educational Services Evaluation

The study that has sustained public policy debate on Head Start for more than a decade (according to Collins, 1977) is the Westinghouse/Ohio study of the effects observed for elementary school children who attended Head Start in the initial years of the program (Cicirelli, et al, 1969). The lack of strong positive findings¹ from this study had several consequences, one of which was

¹The results, however, were not negative; there were differences in favor of the HS children at the first grade.

the drying up of funds for HS longitudinal studies for a number of years.

Since the 1969 Westinghouse study a number of evaluations of Head Start have taken place. From 1969 to 1975 the evaluation activities centered on a variety of innovative options to improve health, social, educational and parent participation services to children and families. (Head Start Planned Variation, Smith 1973; Home Start Evaluation, Deloria, et al, 1974; Project Developmental Continuity, Love, et al, 1977).

In 1975, the Office of Child Development (OCD - now the Administration for Children, Youth and Families, ACYF) planned a group of evaluations of the components of Head Start (health services, parent involvement, handicapped services and educational services -- the present study). The first study, Evaluation of the Transition of Head Start Children into Public Schools, was designed to present an overall picture of the impacts Head Start had upon participants (1977). This evaluation is part of the overall evaluation plan. It is designed specifically to examine the Educational Services component of the Head Start program. This is the largest national evaluation of the educational component of Head Start which has ever been attempted.

Background of the Basic Educational Skills Initiative

As mentioned above there have been a number of innovative programs within Head Start which have also contained evaluations. BES is the newest of these innovative programs. The Administration for Children, Youth, and Families is under Congressional mandate to evaluate all Head Start demonstration projects, such as BES (Public Law - 93-644, Sec 524(a)). As such, the BES program when initiated contained an evaluation component, the subject of this study.

Coincidental with the planning of the educational services evaluation, the Basic Educational Skills initiative was developed by the Planning and Development Division of ACYF. This was in response to a Presidential "call for

efforts to assist children in acquiring the basic skills they need to function successfully in a complex society (RFP, p.3)." Joseph Califano, Secretary of the Department of Health, Education and Welfare at that time, requested through the Assistant Secretary of Planning and Evaluation that a project be developed through Head Start that would foster the acquisition of basic skills in children. Head Start personnel, with the assistance of Abt Associates of Cambridge, Massachusetts, sought to define the parameters of such a program within the traditional goal of Head Start (to bring about a greater degree of social competence in children of low income families). The planning phase for the program culminated in the Head Start Basic Educational Skills Program, Phase I guidelines (Klein, 1978).

Because of the overlapping nature of the evaluation questions, it was decided to combine the educational services and basic educational skills evaluation into one project. The major purpose of the evaluation is to assess the impact of the educational services component of Head Start and the Basic Educational Skills Initiative on the children and parents being served.

Overview of the Study Design

As originally planned, this evaluation is a longitudinal study that will follow children and their parents from preschool through the sixth grade. The study focuses on the preschool and elementary experiences of three groups of children and their parents:

- o Those who participate in typical Head Start programs--Head Start Study Group
- o Those who are eligible for Head Start but who are not enrolled--the Alternative Services (Control) Group
- o Those who participate in the Basic Educational Skills demonstration program--the BES Group

The major evaluation questions to be addressed in this study are as follows:

1. What different types of approaches do Head Start programs use to deliver educational services? How do these approaches differ in BES programs? How do these approaches differ from programs of alternative service setting?
2. How do different program approaches, and ways children and parents partake of the programs, affect the benefits achieved by children and parents?
3. Do children and parents in BES programs benefit more than children and parents in non-BES Head Start programs? Do children and parents in both BES and non-BES Head Start programs benefit more than children and parents in alternative service settings?

The dominant issue contained in this set of questions is a focus on the relationships between program delivery and program effects on a national scale.

As mentioned above, the evaluation is longitudinal and will study children (and their parents) from preschool through the sixth grade. Over the next three years, three cohorts (one small cohort and two full cohorts) of preschool age children will be studied. Each full cohort will be drawn from 30 to 35 Basic Educational Skills demonstration programs and from 30 randomly selected Head Start programs and their communities. It will involve 5400 children and their families: 60 BES children from each BES program, 60 Head Start children from each regular Head Start program, and 60 non-Head Start children from each regular Head Start program's community.

The study design is innovative for two reasons. First, it focuses on the relationships between process and outcome variables in preschool settings. Second, it is one of the first preschool field evaluations to incorporate a true experimental design. In those instances in which a participating Head Start program received applications from more children than it can serve, random assignment of children into the Head Start program and a non-Head Start group will be implemented. The use of this study plan will, hopefully, result in one of the strongest research efforts ever conducted under the auspices of ACYF.

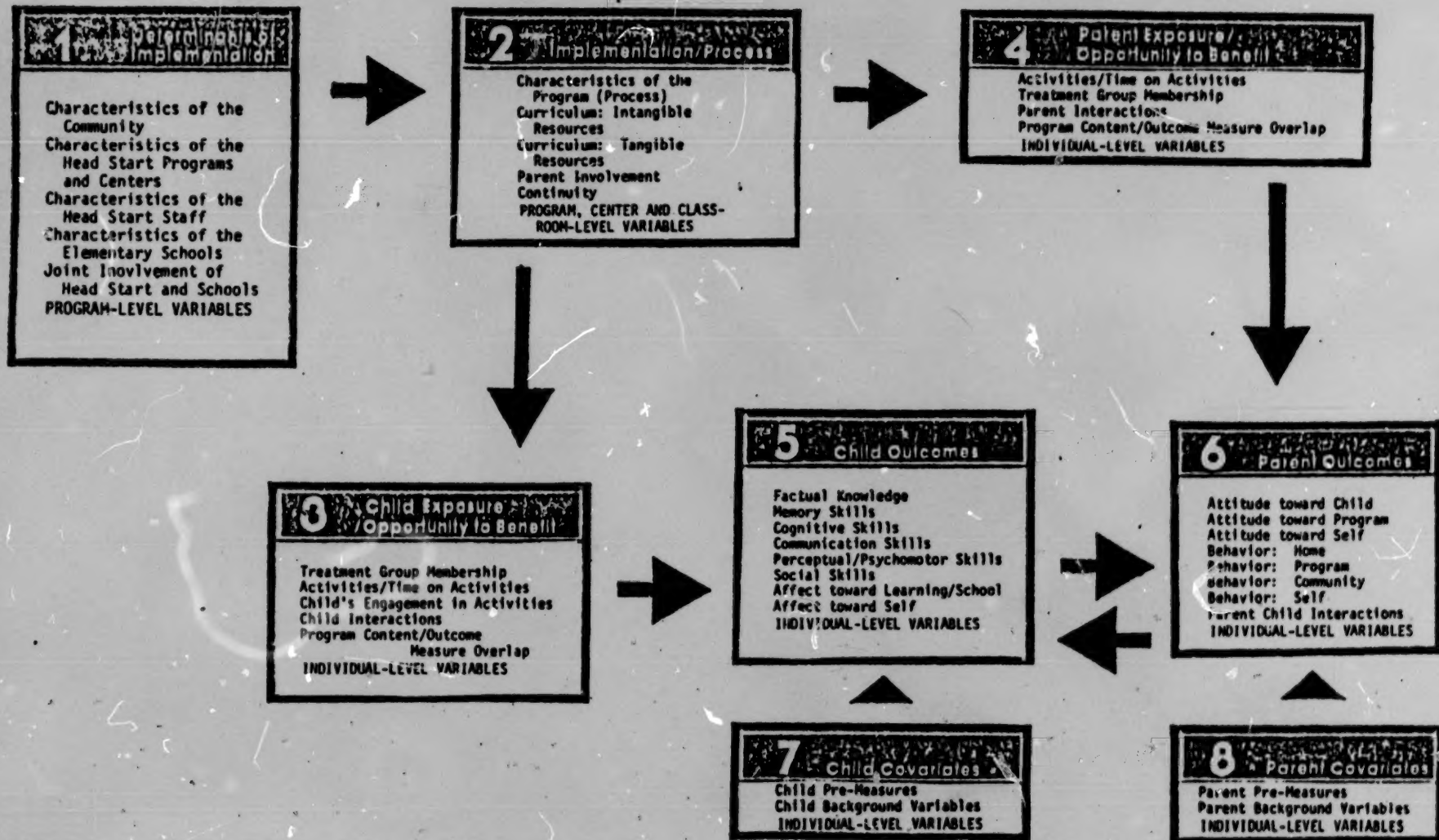
Selecting and Defining the Variables of Interest: The Conceptual Framework for the Evaluation

The goal of this evaluation is to assess the impacts of the educational services component of Head Start and the Basic Educational Skills Initiative on the children and parents they serve. Fundamental to this objective is a conceptual framework that organizes the broad range of process and outcome variables of interest in this evaluation. In general, a conceptual framework is a network of mutually dependent hypotheses about the relationships between determinants, processes and outcomes. A good framework provides an intuitively accurate clustering and sequencing of policy-relevant variables. Such a framework is complete to the extent that new variables and relationships can be incorporated for examination without compromising the framework's integrity of design - that is, without contradicting the logic of its design. Similarly, a good framework will guide the search for unintended and unanticipated consequences of both naturally occurring phenomena and purposive social action.

Figure 1.1 presents the conceptual framework which NTS has followed during the first fifteen months of the National Evaluation of Head Start Educational Services and Basic Educational Skills Initiative, and provides a synthesis of key study objectives. The framework, conceptually, is a synthesis of several theoretical models (Stenner, Strang, and Baker, 1978; Fullan and Pomfret, 1977; Bloom, 1976; Cooley and Lohnes, 1976; and Carroll, 1963). Implicit in the proposed framework is a commitment to understanding the determinants of program implementation, as well as the determinants of student and parent outcomes. The conceptual framework functions simultaneously therefore as an heuristic tool for generating evaluation questions and as a schematic overview of the purpose, value and relative importance of those questions within the general context of of the project.

Conceptual Framework for the National Evaluation of Head Start Educational Services and Basic Educational Skills Initiative

Figure 1.1



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The framework was initially conceived by NTS prior to contract award. It has since been modified, based upon insights of ACYF staff, Head Start project directors, and NTS consultants and staff. The conceptual framework presented in Figure 1.1 is dynamic and longitudinal, to encompass the multidimensional nature of Head Start project processes and outcomes.

The conceptual framework for this study incorporates 8 components. Later in this section each component will be defined with discussions of the categories of variables included in each component. The first component, **Determinants of Implementation**, includes the variables thought to affect the success with which and the ways in which Head Start programs, BES programs, and other preschool programs are implemented. Component 2, **Implementation/Process**, contains those variables which describe the actual program as experienced by the children and families within Head Start and other preschools. Components 1 and 2 are composed variables which are measured at the program, center, and classroom levels.

Component 3, **Child Exposure/Opportunity to Benefit**, deals with the classroom experience of the individual child, drawing an important distinction between the availability of classroom resources and a child's use of them. Clearly, there are some children who derive greater benefit from available resources than others and the domains of this component attempt to distinguish the child characteristics and actions that are responsible for those variations, particularly the differences in time spent in the classroom, in the time spent in various activities, and in the level of engagement of individual children in those activities. The variables in this component are measured at the individual child level. Similarly, Component 4, **Parent Exposure/Opportunity to Benefit**, is also composed of variables which are measured at the individual

level and is an attempt to differentiate between individual parents' experiences in relation to the preschool program. The inclusion of two exposure-to-treatment components is a reflection of NTS's commitment to examining treatment as a continuous multivariate construct and as such is an explicit departure from the classic Fisherian experimental design that examines treatment and control as discrete conditions in which all experimental subjects receive uniform treatment. In a classical design, questions such as "how much treatment did the subject receive?" have limited meaning, for either the treatment was received or was not. Clearly then, an alternative approach must be used in the evaluation of Head Start, where treatment is multi-form and implemented non-uniformly, across and within centers and across and within classrooms.

Component 5, **Child Outcomes**, organizes the physical, cognitive and emotional/motivational dimensions of child development. These variables, like those in the following three components, are measured at the individual level.

Recognizing that the impact of Head Start on the child depends largely on parental attitudes and behaviors both in the home and at the center, Component 6, **Parent Outcomes**, addresses the relationships between parent and child, parent and home, parent and program, and parent and self. Finally, Components 7 and 8 include the covariates for children and parents, respectively. Included in the covariate sets will be pretest measures and theoretically relevant background variables. The covariate sets will be used to adjust for pretest differences not accounted for in the randomization process.

Thus far in the evaluation, NTS has gathered information regarding nearly all of the components of the conceptual framework and has designed instruments for the remaining components. During the site visits to the programs, which are the major focus of this report, the majority of the information collected pertained to the first two components of the framework, **Determinants of Implementation and Implementation/Process**.

In the fall of 1979, the initial administration of child tests took place. That data collection effort is described in Project Report 11, Phase II Executive Summary Report: Fall 1979 Child Data Collection. Those data form the initial information on Child Covariates and are involved in the Child Outcome component as pretest scores with which gain will be calculated once the posttest is administered.

In the remainder of this section on the conceptual framework, the first three components are discussed in detail in preparation for presenting the data collected by NTS during the visits completed to the program sites.

Component One: Determinants of Implementation

Adopting the terminology of Fullan and Pomfret (1977), determinants of implementation are those factors which affect, both positively and negatively, the ways in which programs are implemented, and which have been observed by many investigators to operate as well in a wide range of instructional contexts: in ESEA, Title I (Berman and McLaughlin, 1975) in Career Education (Stenner, Strang, and Baker, 1978); and in Planned Change in Rural School Districts (Rosenblum and Louis, 1977). Others, such as Stufflebeam, et al., (1971), and Cooley and Lohms (1976), have discussed the general importance of "context variables" in evaluating educational innovation; and a number of researchers have noted the importance of specifying "the setting" within which an innovation takes place as a key factor in determining innovations' exportability to other sites [for example, Becker and Whisler (1967); Rodgers and Rodgers (1976); Fullan and Pomfret (1977); and Pressman and Willavsky (1973)].

The variables within this component have been grouped into five categories: characteristics of the community, characteristics of the Head Start programs and centers, characteristics of the Head Start staff, characteristics of the elementary schools, and the joint involvement of Head Start and schools. The variables were generated from the literature review which was part of the

contract proposal preparation and from interaction with ACYF evaluation and program staff. The objective was to identify variables which would: (1) be descriptive of the programs involved in this study; (2) identify factors which may influence the program implementation; and (3) may be viewed as manipulable factors (capable of being purposively changed). For example, program admissions policies are important in describing an aspect of the program, may influence how the program is implemented, and are amenable to policy change. Therefore, if it is discovered that program admissions policies are strongly predictive of program implementation variables, it might be possible to intervene in programs with a view toward implementing admissions policies which have been found to be beneficial.

Variables in the component. Figure 1.2 gives further indication of the particular variables which have been identified in this component for this evaluation. Further discussion of the variables is contained later in this chapter when the data gathered during the site visits to the Head Start programs is discussed.

Instruments. During the first five months of the contract, NTS staff worked intensively with ACYF staff to develop the instruments for the collection of data during the following ten months of the study. Measures which were used for data collection on the variables relating to the Determinants of Implementation were interviews for the program staff, center staff, and teachers. These instruments (the Program Description Interview, Center Description Interview, and Teacher Interview) can be found in Appendix A. A small number of the variables listed in Figure 1.2 were not directly addressed by these instruments. Items relating to the history of innovation and the explicitness of program objectives were deleted from the preliminary instruments to reduce data collection time. Items relating to staff morale were found to be difficult to construct and were therefore deleted for the present. Since data collection

Figure 1.2

Variables Within the Determinants of Implementation
Component of the Conceptual Framework

Characteristics of the Community

Demographics
Support for public education
Community resources

Characteristics of the Head Start Programs and Centers

Nature of Grantee and Delegate agencies
Children and families served
Program admissions
Staff communication
Adoption strategies
Size of staff
History of innovation
Vigor of the policy group
Explicitness of the program objectives, activities and management plan

Characteristics of the Head Start Staff

Ethnicity
Language spoken
Age
Previous experience as a Head Start parent
Education
Work experience
Training - preservice and inservice
Staff morale

Characteristics of the Elementary Schools

(no variables yet measured)

Joint Involvement of Head Start and Schools

(no variables yet measured)

thus far in the study has not involved personnel in elementary schools, items relating to the characteristics of elementary schools and to the joint involvement of Head Start and elementary school programs have not yet been administered.

The interview instruments relevant to the Determinants of Implementation were administered to Head Start program staff during a week-long site visit made by an NTS staff member to each of the Head Start programs in the study (both BES and non-BES) in March, April and May of 1979.

Component Two: Implementation/Process

Delineating and measuring the Implementation/Process activities of BES, Head Start and non-Head Start programs are important for several reasons. First, it is already clear that Head Start is having a positive effect (see for example, Collins, 1977, and Datta, 1978). However, it is not enough to know that BES or Head Start projects as a whole are successful or unsuccessful; rather, we need to identify project components, strategies, elements, and activities which have differentially beneficial attributes. An observation that children in a program outperform eligible children not in the program, reveals nothing about why the served students benefited or what might be done to improve the project. Clearly, therefore, program improvement at both the Federal and institutional levels requires careful specification of the processes contributing to desired outcomes. These specifications would form the basis of an effective evaluation, and only such specifications provide a sound foundation for policy action. "While it is important to know that 'good' programs elicit socially valued outcomes, this knowledge must be coupled with an awareness of what specific program characteristics are associated with child gains." (Collins, 1977, p. 178)

The second reason for measuring Implementation/Process variables is that it is not likely that the overall effect of BES compared either to Head Start or the control sample, or of Head Start to the control sample, will be dramatic (effect sizes greater than 1.0 standard deviation). Even given random assignment, control groups cannot be expected to be "no treatment" groups, as they might have been ten or fifteen years ago. This is not necessarily a negative condition for the evaluation--information can be gathered from the control group that will contribute to our knowledge of what processes are important, regardless of whether they occur in BES, in Head Start, in the alternative services used by the control group, or any combination of the three.

The examination of the program processes which children and families are experiencing is not an entirely new approach. Nearly all of the evaluations of Head Start have attempted to examine process when there has been access to the program. (The Westinghouse/Ohio and Head Start Transition Evaluations, to cite two examples, did not identify children until after the Head Start experience was over, and so could not look at process variables.) The evaluations of Home Start, Planned Variation Head Start, and Project Developmental Continuity, and the ETS Longitudinal Study, have collected varying amounts of program process information. However, the central question in these evaluations has been "Does the program have a positive effect for the participants?" The question of which process elements were important was secondary.

Variables of the component. Figure 1.3 shows the categories of variables which were examined in the Implementation/Process component of the conceptual framework. As was the case with the preceding component, **Determinants of Implementation**, data has been gathered for most but not all variables identified. Some of the variables listed under the "Curriculum: Intangible Resources" category have proved to be difficult to assess thus far. Classroom

Figure 1.3

Variables Within the Implementation/Process Component
of the Conceptual Framework

General Characteristics of the Program

Program options (part day, full day, home based, etc.)
Enrollment
Dropout patterns
Adults present
Schedules

Curriculum: Intangible Resources

Program Emphasis
Activities observed
Teacher behaviors observed (CDA Checklist)
Individualization
Languages spoken
Supervision
Classroom climate
Peer environment, Group mix
Fidelity to model
Degree of stability during the innovation phases
Objectives
Special needs

Curriculum: Tangible Resources

Curriculum guides and materials
Equipment, facilities, and other resources (CDA Checklist)
Group size
Adult-child ratio

Parent Involvement/Continuity with the Home

Parent roles
Home visits
Teacher-family contact

Continuity with the Elementary Schools

(no variables yet measured)

climate has not been directly assessed in the study as a whole. However a number of items relating to the socioemotional classroom climate in the Head Start classrooms were added to the observation system in the pilot study of the instrument, which was conducted at approximately the same time as the site visits. In addition, we have not addressed the variables dealing with the degree of stability of the program during innovation phases and degree of fidelity to a particular program model. Early in the study, these were thought to be important, especially since particular models were expected to be implemented in the BES programs. A shift of emphasis has occurred, however, which may make the investigation of these variables of less importance to ACYF, since no specified models are being replicated but curriculum developers are acting as consultants or facilitators to the BES programs. Therefore, questions of fidelity to model need to be reexamined. The degree of stability during the early phases of the project innovation may yet be pursued by the evaluation and ACYF.

Two other variables for which adequate items have not yet been developed are descriptions of the group mix of children in the classroom and of the children with special needs within the classroom. A small number of items on the ACES observation system described the handicapping conditions observed within the classrooms. A further area of variables which the evaluation contractor recommends pursuing has to do with the peer environment (or group mix). NTS conceptualized this group of variables as being related to the child pretest scores and would deal with the average level of social competence in the group of children, the variance on those constructs within the classroom, and the shape of the distribution of those abilities within the classroom.

Instrumentation. Variables defined under this component were measured with the Program Description Interview, Center Description Interview, Teacher Interview and the ACES observation system, which can be found in Appendices A and B.

The observation system includes a lengthy checklist of teacher behaviors occurring during a full classroom day and a tangible resources checklist for equipment, materials and facilities available in the classroom. In addition, the observation system is a time sampling approach with teacher behaviors and child activities recorded every 15 minutes during a classroom day.

The data for this component was collected during the week-long site visit made by an NTS staff member to each of the programs in the evaluation. These staff members interviewed program staff and spent one to two classroom days observing in the program classrooms. The results of the data collection can be found in later sections of this report.

Component Three (and Four): Exposure/Opportunity to Benefit

The Child and Parent Exposure/Opportunity to Benefit components are composed of parallel sets of domains: activity/time on activity; treatment group membership; child (or parent) interaction; and program content/outcome measure overlap. The child component focuses on the experiences of the individual child and interaction with other children and adults. The component is designed to allow precise measurement of the type and extent of the exposure the individual child receives to experiences promoting cognitive skills, oral language skills, large muscle development, social skills, etc.

Exposure/Opportunity to Benefit is a function both of resources available (e.g., Is there an individual math learning center in the classroom?) and of time on activity (e.g., How much time does a child spend at the math learning center?). Gains from experience with the learning center are determined also, of course, by the quality of the materials, the organization, their adaptability to the child's individual needs as a learner, the quality and extent of teacher and peer interaction during the experience, etc. The point is that resources

available and resources utilized are separate concepts which must be examined separately.

Child Exposure to Treatment/Opportunity to Benefit has been conceptualized in this study as the activities and resources available to a child in the classroom, the amount of time the child spends in the classroom (having a strong relationship to attendance patterns) and the level of engagement of the child in the activities. Level of engagement was measured during the data collection which has thus far taken place by observing children in the Head Start classrooms, identifying the activities in which they are participating, and rating the degree to which the child seems to be involved or not involved in the on-going activity. NTS believes that further pursuit of this measurement technique will yield useful measures of the child's utilization of the "treatment" available to him or her. Data collected during spring 1979 site visits were used to describe classrooms; data collected in future years will, in addition, focus on the individual child. These individual data can then be used in the interpretation of individual child outcome scores.

The variables in this component include: the activities in which a child participates, the amount of time a child spends in each activity, the size of the group in which the child participates in an activity, adult supervision during the activity, individualization of activities for the child, how the activity is chosen for the child, the pacing of the activity for the child, and the feedback received by the child. Also conceived of as part of this component are: child interactions with peers and adults and the role of the child in those interactions; the overlap between program content/objectives with the content of the outcome measures; and treatment group membership.

The components discussed above are those that we refer to as the "process" components. Data collected in relation to these components and their associated variables are the focus of this report. The following components are the "outcome" components; they are discussed here in order to complete the reader's picture of the conceptual framework.

Component Five: Child Outcomes

The desired outcome for children in Head Start has been stated repeatedly by Head Start program planners as "increased social competence." As the use of this term has evolved over time, it has come to be generally accepted to embrace the physical, cognitive, and emotional-motivational dimensions of child development (see, for example, OEO, 1965; Zigla, 1973; Gotts, 1973; OCD Improvement and Innovation, 1973; ACYF/RFP for BES Evaluation, 1978). Within the context of this evaluation, NTS has defined the domains of variables for measuring child outcomes as: cognitive skills, communication skills, factual knowledge, memory skills, perceptual/psychomotor skills, social skills, affect toward learning/school, and affect toward self. The process which NTS has gone through in defining these variables and selecting appropriate measures from existing instruments is detailed in Project Report 3, "Child Outcomes: Individual Testing Battery for the Fall 1979 Cohort."

Component Six: Parent Outcomes

The effectiveness of Head Start programs depends largely on the ability of the child's parents to provide classroom-home continuity in terms of learning situations and feedback, and to manage the home environment in a manner that minimizes stress on the child. Parents' educational, occupational, and socio-emotional aspirations for the child are also vital.

Parent outcomes, then, cannot parallel child outcomes, as they are much broader in scope; requiring NTS to measure program impact upon the parent

(1) within his/her culture and community, (2) in terms of program involvement and commitment, and (3) in his/her relationship with family and the target child. This comprehensive examination of the parent will allow identification of many aspects of program impact beyond the immediate child outcomes.

Process Data Collection Procedures

Thus far in the evaluation, NTS has designed instruments for and gathered information regarding all of the components of the conceptual framework, in varying degrees of completeness. During the site visits to the programs, which form the major focus of this report, the majority of the information collected pertained to the variables identified in the "process" components of the conceptual framework, Determinants of Implementation, Implementation/Process, and Exposure/Opportunity to Benefit. This information was gathered from program staff at the program, center, classroom and individual levels.

Instruments

During the first five months of the contract, NTS staff worked intensively with ACYF staff to develop the instruments for the collection of data during the following ten months of the study.²

Four measures comprised the data collection battery for Phase I, including three personal interviews and a classroom observation system. The interviews which were used are the: Program Description Interview; Center Description Interview; and the Teacher Interview. These can be found in Appendix A. The observational system is called the Alternative Classroom Environment Scale, and can be found in Appendix B.

Program Description Interview (PDI). The PDI is a personal interview administered to the program director of each program. The PDI describes the community, the program, the staff and the children served by Head Start.

²Project Report 9: Implementation of the Study Design, (NTS, 1980) contains a complete description of the procedures used to develop these instruments.

It contributes information to component one of the Conceptual Framework (Determinants of Implementation) as shown in Figure 1-1. The variables it measures are many of those represented in Figure 1-2, such as community characteristics, characteristics of the Head Start program, and characteristics of the staff. The PDI requires about 45 minutes to administer.

Center Description Interview (CDI). The Center Description Interview is much like the PDI, except that its focus is a description of the centers in the Head Start programs. The CDI is administered personally to the center director or the person most knowledgeable about the center. As with the PDI, the CDI contributes information which completes the Determinants of Implementation component of the Conceptual Framework. It contributes information which is more specific to the centers, however. The CDI describes the centers facilities, its staff and its children. In addition, the CDI contributes information to the Determinants of Implementation component of the Conceptual Framework. It provides information about the services provided by the program, curriculum, parent activities and home-school continuity.

Teacher Interview (TI). The Teacher Interview is administered in a 45-60 minute individual session to the lead teacher in the study classrooms. The Teacher Interview contributes data within Conceptual Framework components 1 & 2. It provides a fuller description of the specific teaches regarding to the interview in the areas of teacher background and teacher attitudes. It also provides a description from the teachers viewpoint of the processes to which the children are exposed, such as the curriculum and classroom environment. The TI also provides a description of how individual teachers interact with parents.

Alternative Classroom Environment Scale (ACES). This observation system is composed of three instruments: the Teacher Behavior Checklist, the Tangible Resources Checklist and the Engaged/Allocated/Instructional Behaviors

observation system. The intent of the ACES is to describe the classroom process in different programs. It contributes to the Implementation/Process component of the conceptual framework (#2) by describing the environment which the child is exposed in the classroom. It provides a checklist for tangible as well as intangible resources in the classroom; and it measures selected teacher behaviors.

Data Collection Activities

The Phase I data collection was conducted at each site by NTS Durham staff who were hired and trained by the authors of the three interviews and the developers of the observation system. One trained staff member visited each site for a one week period during March, April and May of 1979. During this five day period, the site visitor discussed the evaluation with as many program staff as possible and accomplished a number of tasks including collection of all the Phase I data for each program. The major data collection activities were:

1. An interview with the program director, using the PDI.³
2. An interview with the center director for one center in each program using the CDI.³
3. Interviews with two teachers in the selected center using the TI.³
4. Observation of an entire class day in each of the classrooms of the interviewed teachers using the ACES.

A typical week long site visit is represented in Figure 1-4.

Respondents

Within each program there were respondents identified prior to the site visit. At each site the director of the program responded to the PDI. He or she selected a center from the program and the site visitor interviewed the director of that center using the CDI. Within the selected center the center

³Each respondent to each interview was asked for feedback on the design and wording of the interview questions, and each was paid a consultant fee for assistance in instrument revision.

director selected two teachers.⁴ The site visitor interviewed these two teachers using the TI and observed in their classrooms using the ACES. The information collected during these site visits is reported in Chapter 3 of this volume. Detailed tables of the responses to each question and of the observations are contained in Appendices C through F.

⁴During this initial visit, evaluation staff left the choice of centers and classes to the program staff. This was done to reduce the stress of the initial visit, at a time when the Head Start programs were being asked to voluntarily participate in the study. In the future, such choices will be made randomly by evaluation staff.

Figure 1.4

SAMPLE SCHEDULE FOR A SITE VISIT (January - May, 1980)

Monday	Tuesday	Wednesday	Thursday	Friday
Presentation of Evaluation/Answer Questions	Data Collection	Presentation of Evaluation Data Collection	Data Collection	Wrap-up for the Week
Individual meeting with: Program Director	Observe in one Head Start classroom from time children arrive until they leave.	Obtain a copy of the PIR transfer into PDI	Observe in one Head Start classroom from time children arrive until they leave.	Meet with BES Coordinator and staff to discuss the week.
Center Director (Where appropriate)		Interview BES Coordinator and/or Program Director 30 minutes - 1 hour		
BES Coordinator		Interview Center Director or person appropriate to respond, 30 minutes - 1 hour		Train local data collectors to contact and interview parents
Grantee/Delegate Agency staff		Meet with staff members individually, if they desire, such as: education coordinator, parent involvement coordinator.		
Elementary School Personnel	Interview teacher 45 minutes - 1 hour	Interview teacher 45 min - 1 hour.		
Group Staff Meeting if desired.	Interview BES staff of elementary school(s), 1 hour	Interview applicant for local data collectors and coordinators		
Arrange meetings with anyone else the site would like informed of the evaluation.	Interview applicants for local data collectors and coordinators		Meet with parent group, if possible.	

CHAPTER 2

HEAD START PROGRAMS VISITED IN THE SPRING OF 1979

The major purpose of this report is to describe the Head Start programs which were randomly selected for participation in this evaluation. This description is in terms of the process data which has been gathered thus far in the study. The previous section of this report describes the study as a whole. We turn now more specifically to the programs involved in the evaluation of the Educational Services component of Head Start. Similar data was collected for the Basic Educational Skills demonstration Head Start programs, and is presented in the companion report to this one (Project Report 6, Description and Analysis of Program Data: Basic Educational Skills Initiative).

Selection of Regular Head Start Programs to Participate in the Evaluation

The program and policy questions inherent in the Head Start Educational Services portion of the study required a sample of children representative of all Head Start eligible children, to be drawn from a nationally representative sample of 30 Head Start programs. To meet this need, the design calls for 30 programs to be randomly selected from a list of all Head Start grantees and for children eligible for those programs to be randomly assigned to Head Start and non-Head Start groups. This design was chosen to facilitate a study of the beneficial effects of various program elements of Head Start and non-Head Start preschool experiences. The sample of 30 Head Start grantees was randomly selected using two stratifiers:

- o population of the city or town in which the delegate agency or grantee was located (3 levels);
- o region of the country in which the delegate agency or grantee was located (4 levels).

The stratifiers guaranteed that all regional clusters of the country are represented in the final sample of Head Start children and that urban, small town and rural populations were included.

The first stratification of the grantees was based upon a measure of the degree of urbanization of the community. Size of community was determined on the basis of the size of the city in which the grantee was located. Urban areas are defined as cities with populations over 50,000. Small town areas are defined as communities with populations under 50,000 but over 10,000. The remaining sites are classified as rural.

The second stratification was based on geographic region. Four regions that were developed in the Head Start Transition Study (Royster, et al., 1977) by using the distribution of children among 10 DHEW regions proved to be sufficient. The four strata are: DHEW Regions 1, 2, 3, and 5 (which can be roughly designated as Northeast); Region 4 (which is the Southeast); Region 6 (which is the Mid-South); and Regions 7, 8, 9, and 10 (which can be designated as the West).

Geographic region crossed with the three divisions created by the degree of urbanization produced 12 cells in all. The total number of Head Start children served in each of the 12 cells as estimated from the ACYF delegate agency file (1976 data) is shown in Table 2.1.

Table 2.1

Number of Head Start Children Served in
Each Cell of the Selection Design

	Northeast	Southeast	Mid-South	West	Total
Urban	62,847	36,052	17,697	32,059	148,655
Small Town	17,220	22,691	9,986	7,555	57,445
Rural	13,777	26,663	11,162	11,856	63,458
TOTALS	933,844	85,406	38,845	51,463	269,558

The number of grantees selected from each cell was proportional to the total number of Head Start children in that cell. For example, 62,847 Head Start children were served through grantees located in the metropolitan Northeast. By dividing 62,847 by 269,558 (the total number of Head Start children nationwide) and multiplying that by 30 (the number of study programs), we find that 6.99 programs should be selected from the metropolitan Northeast. Seven programs would be selected from this cell. Table 2.2 shows the number of programs sampled for each of the 12 cells of this design.

Table 2.2

Number of Grantees Selected in Each Cell
of the Selection Design

	Northeast	Southeast	Mid-South	West	Total
Urban	7	3	2	4	16
Small Town	2	3	1	1	7
Rural	2	3	1	1	7
TOTALS	11	9	4	6	30

Grantees were randomly selected within each cell with the selection based on a probability weighting for each grantee proportional to the number of children served, that is, a probability proportionate to size (PPS) sampling strategy. Therefore, grantees serving greater numbers of children had a greater chance of being selected than did the smaller grantees. If a grantee delegated one or more programs, a second stage sample was drawn. Again, a PPS sampling strategy was used to select one program (run either by the grantee or by a delegate agency) from the grantee to include in the study. For example, if a selected grantee had three delegate agencies (A, B, and C) and delegate A had three times more children than either delegate B or delegate C, the probability

of randomly selecting delegating A would be three times the probability of selecting one of the other two delegates.

Once an initial sample of grantees had been drawn, project staff conferred with national ACYF and regional ACYF staff to determine the number of delegates served by each of the grantees. In addition, regional offices were given an opportunity to screen the programs selected for the evaluation. In two cases (involving Regions 5 and 7) regional offices determined that programs selected were not suitable for the evaluation because there was an impending grantee change in both of those programs. Those two programs were deleted from the sample and the next program in each of those cells was selected as a replacement.

Description of the Selected Head Start Programs

Grantees and delegates in the locations shown in Table 2.3 were selected

Table 2.3

Locations of Head Start Programs Selected in
Each Cell of the Selection Design

	Northeast	Southeast	Mid-South	West
Urban	Elmsford, NY Norfolk, VA Baltimore, MD Columbus, OH Detroit, MI Maywood, IL Chicago, IL	(West Palm Beach, FL) Jackson, MS Asheville, NC	Austin, TX Lafayette, LA	Redwood City, CA Los Angeles, CA Santa Ana, CA Seattle, WA
Small Town	Greensburg, PA Saginaw, MI	Sumter, SC Goldsboro, NC New Bern, NC	Terrell, TX	Greeley, CO
Rural	Oceana, WV Uniontown, PA	Edenton, NC York, AL Denmark, SC	Chandler, OK	Price, UT

for the study in February 1979. The program in Florida, shown in parentheses, was removed from the sample just prior to an NTS site visit, at the request of the Region 4 ACYF office. The grounds for this deletion was, again, impending grantee change in the program. Figure 2.1 shows the geographic distribution of the 30 randomly sampled programs and of the originally selected 17 BES programs. The BES programs were competitively selected by the ACYF regional offices and the national office. That selection is described in greater detail in the companion volume to this report, "1979 Process Data Collection in BES Programs."

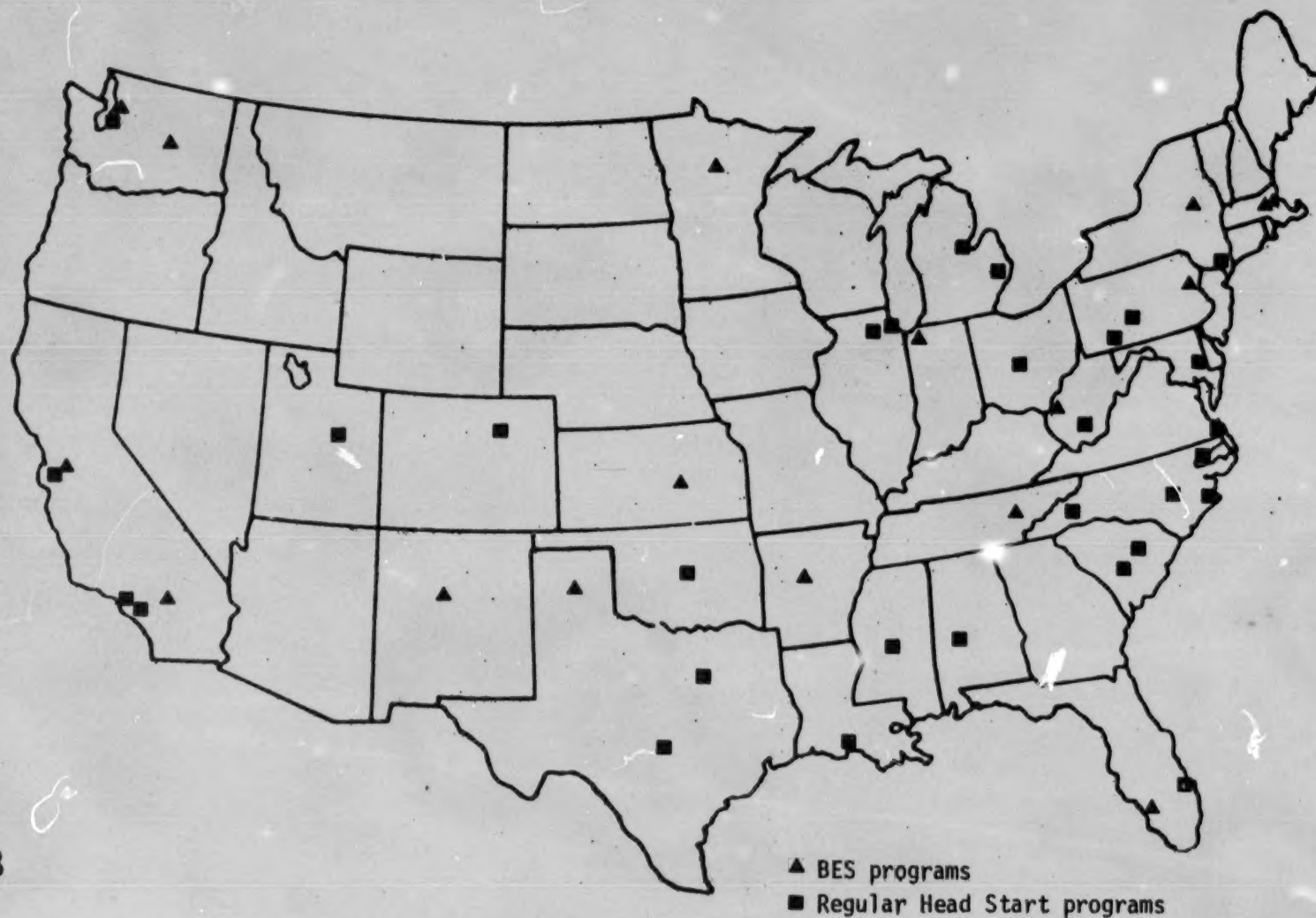
Twenty of the programs are operated directly by Grantees, including all seven of the rural programs and all but one of the seven small town programs. The remaining ten programs are operated by delegate agencies.

The selected programs range in size from an enrollment of 110 children to 1549 children. Table 2.4 shows the distribution of different-sized programs among the sample.

Table 2.4
Frequency of Programs of Different Sized Enrollments

<u>Number of Children Enrolled</u>	<u>Number of Programs</u>
100-200	5
201-300	5
301-400	7
401-500	3
501-600	3
601-700	1
701-800	1
801-900	2
901-1000	1
1101-1200	1
1501-1600	1

Figure 2.1
Geographic Distribution of Programs in Evaluation
(January 1979)



The programs are described in much greater detail in Chapter 3, which presents data gathered during the site visits. Further description is also contained in the section below, comparing the sample of 30 Head Start programs to the universe of Head Start Grantees from which the sample was selected.

Comparison of Head Start Sample of Programs
with Head Start Programs Nationwide

For the Head Start program years between 1976 and 1979, each Head Start grantee completed a Head Start Program Information Report (PIR) for purposes of data collection for ACYF. The PIR is instrument designed by ACYF to collect data in a standardized format from local Head Start programs. Although the PIR questionnaire does not cover information on every aspect of local operations, the PIR does provide a body of uniform information with which to describe the Head Start nationwide.

In July of 1979, Development Associates, Inc., prepared a report for the Assistant Secretary for Planning and Evaluation, Department of Health, Education and Welfare, which is based on the 1976-77 local responses to the PIR (Development Associates, 1979). Since many of the items on the Program Description Interview were based on similar items in the PIR, it is possible to compare the sample of Head Start programs in this study with the universe of Head Start programs in 1976-77 on selected items.

On these key items, the similarity between the sample and the universe is quite striking, particularly since the sample is such a small percentage of the universe (less than 3 percent of the grantees or less than 2 percent of the programs). A comparison of the sample with the universe on the basis of the children served is shown in Table 2.5. As can be seen, the largest discrepancy is in the ethnicity categories represented. The sample has a smaller percentage of white children, and a larger percentage of Black children, than does the universe. As can be seen in Table 2.6, this same discrepancy within ethnicity

Table 2.5

Comparison of Head Start Program Sample with Head Start Program Universe: CHILDREN SERVED

Children Served	Head Start Program 1979 N=29 Delegates and Grantees	Head Start Program 1976-77 N=1100 Grantees
ENROLLMENT		
Children Per Classroom	23.5	22.5
Children Per Program	453	303
AGE COMPOSITION (by percent)		
3 year olds and younger	26	20
4 year olds	57	55
5 year olds	16	24
6 year olds	1	1
ETHNICITY (by percent)		
White, not of Hispanic origin	22	32
Black, not of Hispanic origin	64	45
Hispanic	11	17
Asian/Pacific Islander	1	4
American Indian/Native Alaskan	2	1

groups is also present for the program staff. However, on other variables programs in the sample are very similar to the universe of programs that they represent. For instance, within the sample, there are 23.5 children per classroom compared to 22.2 children per classroom as reported by the 1979 Development Associates, Inc., report. The programs in the sample serve roughly the same proportions of children in different age groups as do the programs in the universe, with slightly more three-year-olds and slightly fewer five-year-olds than in the universe.

Virtually the same percentage of staff in the sample have earned a BA in Early Childhood Education as have staff in the program universe. The percentage of staff with the CDA certificate is slightly higher in the sample than in the 1977 universe, which may simply reflect the growing numbers of Head Start staff who have gone through the CDA program since 1977.

Table 2.6

Comparison of Head Start Program Sample with Head Start
Program Universe: STAFF

Children Served	Head Start Program 1979 N=29 Delegates and Grantees	Head Start Program 1979 N=100 Grantees
CREDENTIALS (by percent)		
CDA	4	2.3
BA in Early Childhood Education	8	7.7
ETHNICITY (by percent)		
White, not of Hispanic origin	26	38
Black, not of Hispanic origin	59	43
Hispanic	9	14
Asian/Pacific Islander	1	1
American Indian/Native Alaskan	4	4

Overall, the sample does appear to be remarkably like the universe which it has been chosen to represent. Since data similar to this will be collected each year of the evaluation, similar comparisons will be made over time. It is expected, of course, that the information regarding the sample of programs will show variance over time and will at times be more similar to the universe of programs than at other times.

CHAPTER 3

RESULTS: HEAD START PROCESS DATA

The initial chapters of this report describe the site visits to Head Start programs by NTS staff members, which were conducted in March, April and May, 1979.¹ With this section, we begin to discuss the data gathered during those site visits. The variables which are defined as Determinants of Implementation are presented first not only because they comprise the first component of the conceptual framework (described in Chapter 1) but also because the information contained here provides a good overview of the Head Start programs involved in the study.

Determinants of Implementation

Determinants of Implementation are those factors which affect, both positively and negatively, the implementation of Head Start programs at the program or center level; they are the variables which help to shape the program. The variables discussed in this section are grouped into three broad categories: Characteristics of the Community, Characteristics of the Program and Centers, and Characteristics of the Head Start staff.

Characteristics of the Community

The 28 Head Start programs in this portion of the study were randomly selected (as described in Chapter 2) for participation in this study to be representative of the Head Start programs across the country. Because of the

¹A more thorough description of the site visit procedures is contained in Project Report 9, Volume 2, Implementation of the Study Design: Logistics.

stratification used, 53.3 percent of the programs in the sample are in communities defined as urban (population of 50,000 or more); 23.3 percent are in areas defined as small towns (population of 10,000 to 50,000); and 23.3 percent are in areas defined as rural (population less than 10,000). The proportion of programs in the sample in each type of area is approximately equal to the proportion of Head Start children in each of those types of areas across the country. According to the program directors interviewed, approximately 21 percent of the programs in the study serve an area that can be described as a city. Thirty-four percent serve an area described as a county, another 24 percent serve a joint city-county area, and 21 percent serve multiple counties [Table PDI-2].²

Community resources. Head Start center directors were asked about the availability in their communities of a number of categories of community resources. [Tables CDI-30a through 30k] Of the eleven categories of resources listed, nine were available in at least 70 percent of the communities (public health clinics, mental health clinics, speech therapy clinics, psychological services, family planning services, nutrition services, hospitals, community work and training programs, and housing authorities). The other two resources on the list were family counseling agencies (available to 69 percent of the programs) and child guidance clinics (available to 62 percent of the programs).

The educational arrangements available within the community for five year olds was another community resource discussed with center directors. While only 31 percent of the Head Start programs are in communities where there is mandatory public kindergarten, 79 percent of the communities do have public kinder-

²NOTE: When tables are referred to in the text with a combination of letters and numbers, the tables are contained in the Appendices. For example, "PDI-2" refers to the table for responses to item 2 on the Program Description Interview, which is contained in Appendix C. The appendices contain tables for each item of each instrument: Program Description Interview, Center Description Interview, Teacher Interview and ACES observation system.

gartens available. Seventy-two percent of the center directors also reported the availability of private kindergartens. Sixty-nine percent reported public day care available for five year olds. Eighty-three percent said there was private day care available for five year olds. In 48 percent of the Head Start programs, five year olds are able to continue in Head Start [Table CDI-17].

Characteristics of Head Start Programs and Centers

The delegate agencies sponsoring the Head Start programs in the study sample are categorized by type of agency as shown in Table 3.1 [from Table PDI-1]:

Table 3.1

Types of Delegate Agencies Sponsoring the Head Start Programs
(N = 29 programs)

<u>Type of Agency</u>	<u>Percent of the Delegate Agencies</u>
Local community Action Agency	28%
City	0%
School System	14%
Institution of Higher Learning	7%
Private Non-Profit Organization	38%
Other	10%

Children and families served. The ethnic composition of the groups of children served by the Head Start programs in this study are described in Table PDI-10. The average percentages in the programs of the major ethnic groups identified for the purposes of this study were: White, not of Hispanic origin, 22 percent; Black, not of Hispanic origin, 64 percent; Hispanic, 11 percent; Asian/Pacific Islander, one percent; and American Indian/Alaskan Native, two percent.

In the centers where the NTS site visitor conducted classroom observations during the site visit (which represent a subset of the program's classrooms), the ethnic composition of the children was as follows: an average of 24 percent

White, 63 percent Black, 12 percent Hispanic, 1 percent Pacific Islanders/Asian, and 1 percent American Indian/Native Alaskan. Within these centers, an average of 6 children (7 percent) speak a language other than English as their primary language. Ninety-five percent of these children speak Spanish as their primary language [Tables CDI-11 and CDI-12].

The programs in this study serve children ranging in age from three years to six years. The programs serve an average of 120 children of three years of age and younger, 266 four year olds, 76 five year olds, and three six year olds [Table PDI-11]. In terms of the percentages of children of different ages being served by the programs, these Head Start programs serve 57 percent four year olds, 26 percent three year olds and younger, 16 percent five year olds, and one percent six year olds.

Center directors were asked how far from the center the majority of the families served by their center lived. Twenty-eight percent of the families in these centers live less than two miles from the center; 34 percent live two to five miles from the center; and 34 percent live more than five miles from the center [Table CDI-2]. The most common way for children to be transported from their homes to the center is by program-provided transportation, generally a program bus (69 percent) [Table CDI-3]. In 66 percent of the programs, some parents also drive children to the Head Start classes; in 52 percent of the centers, some children walk to the center; and seven percent of the centers' children take public transportation to their Head Start class.

In the centers observed for this study, there were an average of five classrooms per center, with a range of 1 to 18. Total center enrollment averaged 85 children, with a range from 23 to 324 [Tables CDI-5 and CDI-8]. Average daily attendance at the centers in this study was 70 children, or 82 percent [Table CDI-9]. Centers in the study had had an average of 11 dropouts

from the program from the beginning of the program year until March 1, 1979 [Table CDI-10].

Program admissions. Information about the way parents apply for Head Start and the ways in which programs decide which children are selected for admission (if there are more qualified applicants than there are spaces in the program) was explored with the center directors. This issue is of importance not only for descriptive purposes, but also for carrying out the random assignment procedures within this study. Center directors were asked to identify the ways in which parents most often find out about their programs. Four methods were each cited by 90 percent or more of the programs: door-to-door recruitment; radio, television or newspaper ads; word of mouth; and older children who were in Head Start [Table CDI-14]. In addition, 76 percent of the programs said that posters in housing projects, grocery stores, and other meeting places helped to acquaint parents with programs available.

Programs appear to vary a great deal in the ways in which they decide on admissions and the means by which they come to establish their admissions policies. We asked center directors how the program decides whom to serve if they are unable to serve all of the eligible families who apply. Seventeen percent of the center directors said they are able to accept all eligible applicants. The remaining center directors named the considerations shown in Table 3.2 as primary elements of their decision making [from Table CDI-15]. According to center directors, the individuals and groups in Table 3.3 have contributed to the admissions policy [from Table CDI-16]. Note that, although ACYF strongly urges that the parent advisory groups have input into such important program decisions as admissions policies, only 72 percent of the center directors indicated that this was the case.

Table 3.2

How Programs Decide Whom to Serve
(N = 29 programs)

<u>Admission Criteria</u>	<u>Percent of Programs Considering This is a Primary Element</u>
Lowest income first	83%
First-come/first-served	45%
Handicapped Children	86%
Older Head Start Siblings	48%
Large Variety of Program-specific Criteria	86%

Table 3.3

Persons Involved in Setting Admissions Policy
(N = 29 programs)

<u>Contributors to Admissions Policy</u>	<u>Percent of HS Programs</u>
Grantee Agency Policy	17%
Program Directors	62%
Center Directors	14%
Teachers	21%
Other Staff	55%
Parent Advisory Committees	72%

Staff communication. Center directors were asked about the frequency of their contact and communication with: their program director, other center directors, teaching staff, non-teaching staff, and most parents. Their responses are shown in Tables CDI-29a through CDI-29e. From their responses, it appears that most center directors see their program directors and their teaching staff almost daily. They seldom see other center directors as often as once a week, but they see their non-teaching staff at least two to three times a week. Finally, they see parents approximately once a week or less frequently.

The kinds of contact and communication between the Head Start program and the public schools is of interest to this study, particularly in the context of the Basic Educational Skills demonstration programs. Center directors were asked about their communication with public school officials. Seven percent of the regular Head Start center directors reported very little communication with the public schools. According to the remaining 93 percent of center directors, the issues shown in Table 3.4 are discussed at least occasionally with public school staff [from Table CDI-23]. The final two items in the table would appear to be critical elements of continuity between Head Start and School, and are fortunately discussed in large numbers of programs.

Table 3.4

Program Issues Discussed Between Center Directors
and Public School Officials
(N = 29 Center Directors)

<u>Issues Discussed</u>	<u>Percent of Centers Reporting</u>
Funding	21%
Staff training	35%
Parent involvement	48%
Curriculum	59%
Individual children	79%

Adoption strategies. As was discussed in the previous section on the conceptual framework, the strategies by which programs go about making decisions on program approach and adopting curriculum changes are critical variables in studying the determinants of how programs are implemented. Both center directors and teachers were interviewed on this topic. Interestingly, center directors and teachers do not entirely agree on the question. Twenty-one percent of the center directors say the teacher decides on the teaching approach and materials to use in the classroom, compared with 49 percent of the teachers

who say this. Seventy-two percent of the center directors report that the teacher has assistance in making these decisions, while only 45 percent of the teachers reported that they had such assistance in making these decisions [Tables CDI-60a and TI-66]. When asked what individuals other than the center director and teacher are involved in the decision regarding the teaching approach or materials, center directors and teachers answered as shown in Table 3.5 [from Tables CDI-60b and TI-67].

Table 3.5

Personnel Besides Teachers and Center Directors who are Involved in Curriculum Decisions

<u>Contributor</u>	<u>Percent as Reported by Center Directors</u>	<u>Percent as Reported by Teachers</u>
Program Director	53%	22%
Education Coordinator	70%	59%
Head Teacher	47%	4%
Teachers as a Group	57%	-
Aides	50%	11%
Parents	50%	0%
Public School Staff	13%	0%

Characteristics of the Head Start Staff

A number of staff characteristics are thought to shape the program process which is experienced by the children and families. That is, both NTS and ACYF expect that certain descriptive characteristics of the staff members who are implementing the program will influence the ways in which they implement that program. Discussed in this section are the characteristics of the staff members of the Head Start projects in this study sample. Some of the information was obtained directly from the staff members in interviews and classroom observa-

tions. Other information concerns the program and/or center staff as a whole, and was described by the program director and the center directors in the interviews. The following categories of characteristics are discussed here: ethnicity; prior experience; age; training and education, including preservice and inservice training; and teacher attitudes. Some of the variables presented here could conceivably be placed in the description of the program process which is the next major section of this report. We are making a distinction, however, between the program characteristics which describe classroom experience of children (next section) and those program characteristics which do not describe the classroom experience of children but which do influence that classroom experience (this section). Therefore, a decision has been made to present the staff characteristics in this section, the determinants of implementation.

Ethnicity and language spoken. Of the individual staff members listed by program directors on their program staff rosters, 26 percent were White/not of Hispanic origin; 59 percent were Black/not of Hispanic origin; 9 percent were Hispanic; 1 percent Pacific Islander and 4 percent American Indian/Native Alaskan [Table 3.6 below and Table PDI-4]. Within each program visited, one center was selected for interviewing teachers and observing classrooms. The directors of these centers were also interviewed. The composition of staff members listed by center directors on their center staff rosters did not differ greatly from percentages just given for program staffs as a whole. Within these centers, 28 percent of the staff were White, not of Hispanic origin; 63 percent Black, not of Hispanic origin; and 8 percent Hispanic [see Table 3.6 below and Table CDI-20b]. Program directors and center directors were also asked to report on their staff roster any languages other than English spoken by program staff. Within the programs in this study, 23 of the 254 staff members, or about one percent, speak Spanish, less than one percent speak a European language, and

less than one percent speak another language. Within the selected centers, ten percent of the staff speak Spanish and one percent a European language [Tables PDI-12d and CDI-20q]. The languages which teachers actually speak in the classroom are reported in the chapter on program process, which follows, and can be found in Table TI-20.

Table 3.6
Ethnicity of Center and Program Staff
(N = 29 programs, 29 centers)

	<u>Percent of All Program Staff</u>	<u>Percent of All Center Staff</u>
White, not of Hispanic Origin	26	28
Black, not of Hispanic Origin	59	63
Hispanic	9	8
Asian/Pacific Islander	1	0
American Indian/Native Alaskan	4	0

Teacher age. The average age of the 53 teachers interviewed during the Head Start site visit was 40 years, with a range from 22 years to 66 years. [Table TI-3].

Previous experiences and education. Previous work, education, and Head Start experiences were explored with the teachers interviewed. Thirty-eight percent of the teachers interviewed have had children in Head Start in the past, or presently have a child in Head Start [Table TI-1]. Of those, 71 percent report that they began working with Head Start as a result of their experience as a Head Start parent [Table TI-2]. On the program staff roster, 97 percent of the staff listed were employed full time in the Head Start project and two percent were employed part time [Table PDI-12a]. The average length of time the program staff had been in their current positions was five years, with a range from .5 - 11 years [Table PDI-12c]. Of the staff on the center staff roster, 88 percent were employed full time in the center, 6 percent part time, and 4 percent were classified as CETA/WIN. The average length of time that center

staff members, like program staff members, have been in their current positions was 5 years with a range from 1 to 16 years. Of teachers interviewed as part of the program site visit, 98 percent were employed full time by their Head Start programs, and only two percent were part time employees. [Tables CDI-20a, CDI-20e, and TI-22] Thirty-five percent of the teachers interviewed were designated head teachers, 62 percent were designated teachers, and two percent were designated directors of their center or program [Table TI-23a].

Educational background. Of particular interest to ACYF is the CDA status of program staff, as well as the bachelor's degree in early childhood education. These characteristics are described in Table 3.7 below. Among the total staffs of the Head Start programs, four percent have received CDA certification, and eight percent have Bachelor's degrees in early childhood education [Table PDI-5].

Table 3.7

CDA and BA Status of Program, Center and Interviewed Staff
(N = 29 programs, 29 centers, 55 teachers)

<u>Background Category</u>	<u>Percent of Staff Members in Head Start Programs</u>	<u>Percent of Teachers in Selected Centers</u>	<u>Percent of Teachers Interviewed</u>
BA in Early Childhood	8		
CDA Credential	4	6	18
Enrolled in CDA Training		30	53

Among the program staff within the selected centers, six percent have attained the CDA Credential and 30 percent are currently enrolled in CDA training [Table CDI-20d]. Of the teachers interviewed, 18 percent have CDA certificates and 53 percent are currently working on CDA certificates [Tables TI-8].³ Of those

³ Since, for this data collection, program directors were asked to choose the centers and teachers who would be the subject of interviews and observation, it is clear that they chose centers and teachers which they believed to be above average, especially in regard to CDA status.

teachers who have received their CDA certificate, the average length of time which they have been certified is four years [Table TI-7].

As can be seen in Table 3.8 below, of program staff as a whole, 16 percent have completed a Masters Degree, an additional 36 percent have completed a Bachelors Degree, another six percent an Associate Degree, and none had completed less than high school. [Table PDI-12b] Among the staffs of the selected centers, one staff member had received a Ph.D. degree; an additional four percent a Masters Degree, 22 percent a Bachelors Degree, an additional ten percent an Associate Degree, 57 percent High School diplomas, and three percent had completed less than high school [Table CDI-20c]. Of the teachers observed and interviewed (selected by center directors), seven percent had had some graduate school training, 34 percent had completed college (38 percent of them in early childhood education), 9 percent had an Associate Degree, an additional 38 percent completed a high school diploma, and two percent had completed less than high school. [Tables TI-4 and 5a]. Forty-four percent of the teachers interviewed are currently enrolled in a formal education program [Table TI-10]. Asked to identify their major fields in the degree program in which they are currently enrolled, 58 percent identified Early Childhood Education, 9 percent Child Development, 21 percent Elementary Education and eight percent Special Education [Table TI-11].

Work experience. Individual teachers were asked about their prior work experience. The teachers interviewed had been with their Head Start programs an average of eight years, ranging from less than one year to fourteen years. Fifty-eight percent of the teachers had had other jobs in their Head Start program before becoming a Head Start teacher, and 72 percent of those having previous jobs with the program had been working as a teacher aide [Tables TI-27, TI-28 and TI-29]. The teachers had also worked at a variety of other

Table 3.8

Educational Status of Program, Center, and Interviewed Staff

	Percent of all Program Staff (N=29 programs)	Percent of All Center Staff (N=29 centers)	Percent of Interviewed Teachers (N=55 teachers)
Less than high school	0	3	2
Completed high school	37	57	38
Associate Degree (2 years)	6	10	9
Bachelor's Degree	36	22	34
Master's Degree	16	4	
Ph.D.	1	1	

educational organizations. Fifteen percent had worked at other Head Start programs, forty-two percent had worked at preschools other than Head Start, twenty percent had worked in kindergartens, thirty-one percent in grades one through three, twenty percent in grades four through six, and fifteen percent in secondary schools [Table TI-29].

In addition to the full time Head Start staff members, the Head Start programs in this sample receive services from a number of other professionals as listed below: [from Table CDI-22]

Table 3.9

Individuals Other Than Head Start Staff Who Provide Services to the Centers
(N = 29 centers)

<u>Professional Category</u>	<u>Percent of Head Start Programs Receiving Services</u>
Speech Therapists	90
Physicians	69
Dentists	86
Psychologists	66
Social Workers	59
Nurses	72
Occupational Therapists	7
Other	34

The services of these professionals are provided by their delegate agency (28 percent), the Head Start grantee agency (62 percent), the local school system (21 percent), and through private organizations and individuals (48 percent) [Table CDI-22a].

Preservice Training. Ninety-seven percent of the Head Start programs in this study offered preservice training before the program year began in the fall of 1978. The average preservice training session was six days long (ranging from one to twenty-four days) and consisted of an average of 36 hours of training (ranging from eight to ninety hours) [Tables CDI-31, CDI-32, and CDI-33]. As can be seen in Table CDI-35, nearly every category of program personnel participated in the preservice training, including Head Start teachers, classroom aides, volunteer classroom aides, program administrators, program coordinators, parents and public school teachers. The subjects dealt with in the preservice training sessions are shown in Table CDI-36b. Topics discussed by 70 percent or more of the programs were: administrative methods, planning classroom activities, health issues, parent involvement, general program operations, services to the handicapped, and social services.

The information above regarding the preservice training sessions was obtained from interviewing center directors. Individual teachers were also asked about preservice training sessions. Eighty-four percent of the teachers reported that they had attended preservice training sessions before the start of that program year. Of those who participated in training, the average number of days spent in preservice training was six and the average number of hours they spent in preservice training was 36, agreeing with the reports of the center directors [Tables TI-46, TI-47, and TI-48]. Teachers reported a high degree of satisfaction with the preservice training. Eleven percent said they were "extremely satisfied", 59 percent "very satisfied", 28 percent "somewhat satisfied", and only two percent "not satisfied" [Table TI-53a].

Inservice training. Ninety percent of the center directors reported that their programs had regularly scheduled times for inservice training. The programs had held an average of four inservice training sessions during the month previous to the site visit (with a range from 1 to 22 sessions) [Tables CDI-40 and CDI-41]. In these inservice training sessions, teachers had spent an average of 13 hours during the previous month, with a range from three to 50. Again, the persons attending inservice training sessions represented a full range of program personnel: teachers, paid aides, volunteer aides, program administrators, program coordinators and parents [Tables CDI-42 and CDI-43]. Topics discussed at the inservice training sessions tended to be very similar to the topics reported above for preservice training [Table CDI-44]. Eighty-five percent of the teachers interviewed reported that they had attended inservice training sessions during that program year. Of those teachers who had attended inservice training sessions, the average number of sessions a teacher attended in the past month was three (ranging from one to twelve), and the average number of hours spent in inservice training in that month was eleven (ranging from three to 32) [Tables TI-54, TI-55 and TI-56]. The teachers' satisfaction with their inservice training sessions was even higher than that reported for preservice training, with 36 percent reporting that they had been "extremely satisfied" and 50 percent reported "very satisfied" with the inservice training sessions [Tables TI-62a and TI-62b].

Teacher attitudes. The teachers who were interviewed as part of the study were asked to consider each of sixteen statements regarding the role of parents in the education of their child and in the preschool program. They were asked to indicate how strongly they agreed or disagreed with each statement. This was an attempt to get an indication of the teachers' overall attitudes toward parent involvement in early childhood education. The sixteen

statements and the teachers' responses to them are shown in Appendix A (Teacher Interview) and in Tables TI-83a through TI-83p. A common experience with attitude scales of this nature is that people do not use the two extremes of the scale--whether a three point, five point or seven point scale. Instead, the choices between the two extremes are much more commonly chosen to express people's attitudes. It may be that there is a human tendency not to express opinions in extremes. However, interestingly enough, the group of teachers interviewed in this study showed an overwhelming tendency to "strongly agree" with statements which would indicate that the parent had a very important role in educating the child and to "strongly disagree" with statements which indicated that the parents should not interfere with the preschool education of their child. For example, ninety-four percent of the teachers strongly agreed with the statement, "Parents can teach children many things that will help them in Head Start." Eighty-four percent of the teachers strongly disagreed with the statement, "There is little parents should do about preschool practice and policies." Ninety-four percent of the teachers strongly disagreed with the statement, "Once a child is in school, there is little a parent could do at home to help educate him/her."

There were, however, a few items on which teachers did not seem to have such strong unanimous opinions. Most of these had to do with whether or not teachers and parents should tell each other how to help their children. For example, only 49 percent of the teachers strongly agreed with the statement, "Parents want me to tell them how to help their children." And only 49 percent strongly disagreed, 24 percent mildly disagreed, and 16 percent mildly agreed with the statement, "Once a child is in the preschool, it is the preschool's responsibility for his/her education" [Tables TI-83a through 83p].

Implementation/Process Variables

This section contains information regarding the actual program process, as experienced by the children and families within Head Start. (The identification of variables for this component of the conceptual framework was described in Chapter One.) First, a general description of the programs is given, including a discussion of the schedules which the programs and teachers follow. Then the nature of the curricula of the programs is described, as seen by the NTS visitors and described by program staff. The curricula are described first in terms of the intangible resources available to the programs (the curriculum emphases, the role behavior of the teachers, and the supervision of the teachers). A discussion of the tangible resources portion of the curricula follows, which describes the curriculum and diagnostic materials used, and the equipment and facilities available to each classroom. The final sections discuss the parent involvement component of the local Head Start programs, and the level of continuity between the Head Start programs and the elementary schools.

General Characteristics of the Programs

Program options. By far the majority of Head Start programs in this sample offer part-day class sessions only (72 percent), while 17 percent offer full-day sessions only, and an additional 10 percent offer both part-day and full-day classes [Table PDI-3]. Twenty-four percent of the programs offer home-based program options to their families. Thirty-one percent of the programs operate morning and afternoon (double) sessions [Table CDI-4]. Among the programs offering full-day classes, the average program operates seven centers and eleven classrooms. Their average total hours of classroom operation per day is six.

Among the part-day programs, the average program operates nine centers, and nineteen classrooms, and is in operation for an average of 5 hours per day [Tables PDI-7 and 8].

Enrollment. As shown in Table 3.10 below, the Head Start programs in this sample had an average enrollment of 453 children in 1978-79, with an enrollment range from 110 to 1549 [from Table PDI-9]. The average number of children per classroom was 23.5. The average program had had a total of 45 dropouts (10 percent) by April 1 of the program year, with a range from 0 to 153 dropouts. Less than 8 percent of the children in these programs were from families with incomes above the Head Start eligibility guidelines. The average program has nine four-year-old classes (with a range from 0 to 165) and serves an average of 266 four-year-olds, 120 three-year-olds, 76 five-year-olds, and 3 six-year-olds [from Table PDI-11].

Table 3.10
Enrollment of Head Start Programs in the Evaluation
(N = 29 programs)

<u>Enrollment</u>	<u>Total</u>	<u>Range</u>	<u>Average</u>
Actual	13160	110-1549	453
Planned	13556	135-2000	467
Above the poverty line	888	0-179	31
Dropouts by April	1312	0-153	45
Four-year-olds	7719	---	266

Adults present. Fifty-four classrooms were observed for a period of one day each during the one-week site visits to the Head Start programs. At least two adults were present in every classroom observed, and the average adult/child ratio was 1 to 6 [Table ACES-2J]. Information about the adults and children in

Table 3.11

Adults and Children Present in Observed Classes*
(N = 54 classes)

	<u>Total</u>	<u>Average Number Per Classroom</u>	<u>Percent of Total</u>
Number of Adults Present	146	2.7	-
Sex of Adults Present			
Male	5	<.1	3
Female	140	2.6	96
Ethnicity of Adults Present			
White, not of Hispanic origin	36	.7	25
Black, not of Hispanic origin	94	1.7	64
Hispanic	16	.3	11
Asian/Pacific Islander	0	0	0
American Indian/Alaskan Native	0	0	0
Number of Children Present	904	16.7	-
Sex of Children Present			
Male	472	8.7	52
Female	432	8.0	48
Age of Children Present			
2	0	0	0
3	75	1.4	8
4	548	10.1	61
5	226	4.2	25
6	55	1.0	6
Ethnicity of Children Present			
White, not of Hispanic origin	204	3.8	23
Black, not of Hispanic origin	574	10.6	63
Hispanic	104	1.9	12
Asian/Pacific Islander	1	<.1	0
American Indian/Alaskan Native	0	0	0
Number of Children Identified As Handicapped	111	2.1	12

*Information in this table is taken from Tables ACES 2A through 5 (Appendix F).

the observed classes is summarized in Table 3.11, above. Nearly all the adults in the classroom were women; only 3 percent were men. Sixty-four percent of the adults were Black, 11 percent Hispanic and 25 percent White. Note that these percentages for adults match almost exactly the corresponding ethnic percentages among children in those classrooms. Of those adults who were not the classroom's lead teacher, 75 percent were identified as an Assistant Teacher or a Teacher's Aide [Table ACES-2I]. The other 25 percent fell into numerous other categories, including Parent Volunteer. In the observed classrooms, 67 percent of the lead teachers were Black, 6 percent were Hispanic, and 27 percent were White. Among the assistant teachers in the observed classrooms, 70 percent were Black, 11 percent Hispanic and 18 percent White.

Schedules. Teachers were asked to report some basic information about their daily, weekly, and monthly schedules. Fifty-five teachers were interviewed in the Head Start programs visited. According to these teachers' reports, an average of 26 percent of the classroom day is spent in teacher-directed activities, 22 percent is spent in child-selected activities, 21 percent in caregiving activities, and 13 percent in meals; and the teachers spend 11 percent of their time doing planning [Table TI-32]. Table 3.12 summarizes the numbers of hours that teachers spend in specified activities, other than in the classroom with children, in an average month [from Table TI-33a].

Note that teachers report that administration and paperwork is the single category on which they spend the most hours (an average of 23 hours per month). The four activities which receive the next highest number of hours per month are "talking with parents individually at the center" (12 hours per month); "talking with other staff about individual parents or children" (12 hours per month); "giving training in a one-to-one situation" (11 hours per month); and "making home visits" (9 hours per month).

Table 3.12

In An Average Month, the Number of Hours Teachers Spend in
Non-Classroom Activities
(N = 55 teachers)

Activities	Number of Hours	
	Average	Range
Talking with parents individually at the center	12	0-40
Attending parent meetings	3	0-12
Talking with other staff about individual parents or children	12	1-60
Meeting with program coordinators in a group setting	6	0-30
Talking with program coordinators individually	4	0-18
Providing social services, for example, making phone calls for referrals to a social service agency	2	0-16
Providing health services, for example, assisting parents to get medical or dental services for their children	1	0-16
Driving children or parents to Head Start or to Head Start activities	3	0-40
Giving training in a group setting	3	0-36
Giving training in a one-to-one situation	11	0-80
Performing administrative tasks or paperwork	23	1-87
Making home visits	9	0-48

The teachers were also asked whether they have regularly scheduled times for a number of specified activities. One hundred percent reported that they have a regularly scheduled time for meeting with their program coordinators in a

group setting, while only 22 percent of them said that they have such time with their program coordinators individually. The large majority of the teachers (74 percent) have a scheduled time for performing administrative tasks or paperwork. Among the activities for which only a few teachers had regularly scheduled periods were: providing social services (9 percent); providing health services (4 percent); and driving children or parents to Head Start or Head Start activities (9 percent) [Table TI-33b].

Curriculum: Intangible Resources

In discussing the curriculum, we have divided the information into two areas. The first deals with the intangibles of the curriculum (the behaviors of the adults, their supervision, and the emphases which the teachers and curriculum builders have chosen for their program). We deal separately with the tangible resources of the curriculum, which include the facilities, equipment and materials available to these children and the adults in the classroom. This section, then, deals with the intangible portions of the curriculum.

Emphasis. Center directors and classroom teachers were asked to consider a list of developmental categories and were asked to rank each category according to which ones they felt were most emphasized in the classes in their center or being taught by them, respectively. The list included sensory motor development, language development, group and social skills development, concept development, academic skills development, self-esteem development and motivational development.

The responses of center directors and teachers are shown in Table 3.13 [from Tables CDI-61 and TI-64]. The area of emphasis ranked highest by both center directors and teachers was Self-Esteem Development, followed by Group and Social Skills Development and Language Development. This emphasis on self-esteem and social skills is highly consistent with ACYF expectations that these

areas are believed to be more appropriate for the developmental level of three- and four-year olds than more academically-oriented areas.

Very few center directors (CDs) ranked the following areas first: Concept Development (1 CD); Academic (1 CD); Motivational (1 CD); and Sensory Motor Development (0 CD). Academic Development and Sensory Motor Development were ranked first by only one and two teachers, respectively.

Table 3.13

Rankings of Developmental Categories Teachers Emphasize,
According to Center Directors and Teachers

Area of Emphasis	According to Center Directors (N=29)		According to Teachers (N=55)	
	Number of Times Ranked First	Average Ranking	Number of Times Ranked First	Average Ranking
Sensory Motor Development	0	6	2	5
Language Development	6	5	10	3
Group and Social Skills	4	3	8	3
Concept Development	1	7	3	5
Academic Development	1	5	1	6
Self-Esteem Development	14	2	30	2
Motivational Development	1	7	5	4

Intent. Every curriculum is guided by some intent or philosophy. Center directors and teachers were asked to share their opinions about how a classroom should operate. They were asked to read descriptions of five classrooms (see Appendix A), each of which represented a particular curriculum philosophy or teaching style, and pick the one which most closely resembled their own. The classroom descriptions have been judged by experts to represent: an open classroom with emphasis on the whole child; a classroom with developmentally sequenced activities, with emphasis on individual children; a structured classroom with emphasis on academics; a classroom with child-directed activities, with emphasis on self-instructional materials; and a Piagetian approach, with emphasis on

reasoning. Center directors were asked to pick the one which most described the classrooms in their center, and teachers were asked to select the one which most described their own classroom. Directors and teachers could also elect to say that none of the descriptions was appropriate to their classrooms. As can be seen in Table 3.14 [from Tables CDI-58 and TI-63], the classroom most often selected by both center directors and classroom teachers, by an overwhelming margin, was Classroom Description #2, "Developmentally sequenced activities, with emphasis on individual children." Fifty-five percent of the directors and fifty-four percent of the teachers chose that classroom description. For the remaining center directors and teachers, however, there is not much agreement. The second most often chosen category for center directors (17 percent) was Classroom Description #1, the open classroom with emphasis on the whole child. The teachers, on the other hand, picked Classroom Description #5 as their second most often chosen classroom (24 percent), the Piagetian approach with emphasis on reasoning.

Observation. Much insight into the intangible curriculum which the children experience in a Head Start classroom can be gained by looking at the results of the observations of 54 classrooms conducted during the NTS site visits to the programs. Observers remained in each classroom for a full classroom day, from arrival of the children to departure. Every 15 minutes, the observer recorded which categories of activities had been taking place (and recorded some aspects of group size and child behavior, reported above, and in a later section).

Activities observed. A first attempt at categorizing observed activities is shown in Table 3.15, below, and is referred to here as "allocated time." This table is a summary of more detailed information available in Tables ACES-7A through 7G (which contain both minutes and percent of classroom day). As can be seen in Table 3.15, the single category of activities on which the most time is spent in a Head Start class is Free Play (56 minutes per day). Second is

Table 3.14

Center Director and Teacher Selections of Classroom Descriptions

Classroom Description	Center Directors (N=29)		Teachers (N=55)	
	Number of Center Directors	Percent	Number of Teachers	Percent
Open Classroom, emphasis on "Whole" child	5	17	3	6
Developmentally sequenced activities, emphasis on individual children	16	55	29	54
Structured classroom, emphasis on academics	0	0	1	2
Child Directed, emphasis on self-instructional materials	2	7	2	4
Piagetian approach, emphasis on reasoning	2	7	13	24
None of the above describes classroom	3	10	6	11

Meals/Snacks (nutrition is an important Head Start component); and the third most-time spent category is Cognitive/academic activity (defined as those activities in which teachers or other adults were focusing on concepts, reasoning, or language). It will be necessary to arrive at finer distinctions in activities before we can determine whether time spent in the classroom is consistent with teachers' stated emphases. An interesting pattern emerges when the classes observed are divided into two groups--classes with naps and classes without naps. After completing site visits but before the data had been examined, it had been the impression of the site visitors that the differences

between these two groups of classes related almost entirely to time spent in napping (of course) and in free play (with a small difference, perhaps, in meal time). However, as can be seen in Table 3.15, the biggest single difference in number of minutes spent in a type of activity (other than naps) is in cognitive/academic activities; the children in classes with naps get an average of 17 minutes more cognitive/academic activities per day than do children in classes without naps.

Table 3.15

Allocated Time in Observed Classes
(N=54 classes)

Activity	Minutes of Classroom Day Spent in Activity		
	All Classes	Classes with Naps	Classes without Naps
Arrival/departure	16	19	14
Transition/unallocated time	29	36	25
Toothbrushing/washing up	10	13	9
Meals/snacks	41	49	35
Nap/rest time	31	71	4
Free play	56	59	54
Directed play	15	19	13
Music/art	25	29	23
Cognitive/academic activities	33	43	26
Other activities	5	7	3

One activity of high interest for ACYF as well as child development specialists is the amount of time during the classroom day which is spent in reading to children. As shown in Table TI-71, the time that teachers report reading to children showed a range from 10 to 120 minutes per day, with an average in the Head Start classrooms of 25 minutes per day.

Observed teacher behavior. When the NTS classroom observer had completed a full day in a classroom, s/he filled out the checklist portions of the ACES observation system, shown in Appendix B. The Teacher Behavior Checklist

contains 104 individual items regarding teacher behavior, which are recorded by the observer as being either present or absent in the classroom during the day of observation. The results of this checklist observation are found in Appendix F, ACES, Teacher Behavior Tables 1. through 10 and are summarized in Table 3.16 below. The "CDA Functional Areas" in Table 3.16 refer to the organization of the checklist and its history. The checklist was developed by Jane Stallings at SRI to assess the overall caregiving environment of day care centers and was organized around the competency areas of the Child Development Associate certification requirements.⁴

It is interesting to note, in Table 3.16, the relatively high scores for the areas of Self Concept and Social Development (70 percent and 73 percent). Only Group Management (77 percent) is higher.⁵ These scores again confirm the teachers' stated emphases of Self-Esteem and Group and Social Skills (see Table 3.13, above).

After having referred to scores on the checklist for functional areas, we hasten to point out that, as yet, ACYF is unsatisfied with the configuration of items making up these areas. NTS used the checklist with nearly all original items intact, as we were requested to do by ACYF. Both NTS and ACYF are currently in the process of revising this checklist (Teacher Behavior) and the companion checklist (Tangible Resources), discussed below. Any addition or deletion of items would, of course, affect functional area scores and percentages.

⁴Abt Associates, Children at the Center, Vols.-I-IV, Cambridge, Mass.: Abt Associates, Inc., 1979.

⁵Home-Center is disregarded; it has only one item and cannot be regarded as a useful scale.

Since the items are still being discussed and examined, trying to interpret individual item scores, as well as functional area scores, is a very subjective task. Keeping that in mind, we want to point out some of the findings on

Table 3.16

Average Number of Items Marked "Present" on
Teacher Behavior Checklist
(N = 54 classrooms)

CDA Functional Area	Number of Items in Area	Average Number of Items Marked "Present", Lead Teacher	Area Score in Percent of Items
Self Concept*	21	14.8	70%
Cognitive and Language Competence	19	10.0	53%
Physical Competence	3	2.0	67%
Health	6	2.9	48%
Safety	6	4.0	67%
Group Management**	22	17.0	77%
Creative Competence	7	3.0	42%
Individual Strength	11	6.5	59%
Social Development	8	5.9	73%
Home-Center	1	.8	81%
TOTAL	104	64.4	62%

*To calculate score, one item had to be reversed from positive to negative.

**To calculate score, two items had to be reversed from positive to negative.

individual items which may be of most interest. Overall, the classrooms observed during the site visit scored quite high on the checklist. As one scans through the tables in Appendix F, one sees a number of percentage "yes" scores below 50 percent. Though presumably each item is thought to be important, it must be pointed out that many of the items would be expected to occur less frequently than once a day--therefore, the observer may well not have seen that

behavior during the day of observation. For example, we would not be upset to find out that only 32 percent of the teachers "told any children that it was all right to make mistakes sometimes." There are, however, some items we might well hope to see at least as often as once a day. We, therefore, find it disconcerting that the items listed in Table 3.17 show such low percentages of "yes" scores. On the other hand, the fact that only four items need to be placed on this list is a resounding tribute to the Head Start teachers' abilities in the important CDA competency areas.

Table 3.17

Teacher Behavior Checklist Items for Which
the Percent "Yes" Scores Appear to be Low
(N = 54 classrooms)

<u>Item</u>	<u>Percent "Yes" for Lead Teacher*</u>	<u>CDA Functional Area</u>
Did the teacher individualize most children's classroom experiences?	42	Cognitive and Language Competence
Did the teacher, when introducing new activities, explain what they would be doing and why?	58	Cognitive and Language Competence
Did the teacher usually give a 5 minute (or so) warning time to children when an activity was about to change?	49	Group Management
Did the teacher encourage or allow children to select their own food?	30	Individual Strength

*NTS compared these percentages with those found during data collection from March through July 1979 on the performance indicator effort. The percentages were: 38, 62, 61, and 52, respectively. (See Urban Systems Research and Engineering, 1979.)

Individualization. We return now to information gained from the site visit interviews. Teachers were asked to describe the activities in which they engage most often when they are working on the individual needs of a child. Teachers were found to vary considerably in their approach to a child's individual needs. Thirty-five percent said that most often they join the child to work on the activity in which she/he is already engaged [Table TI-72]. Twenty-six percent of the teachers said that they generally take the child aside and work with a particular activity or skill in which the child needs help. Fourteen percent of the teachers approach the individual needs of children by grouping children into small groups, all of whom need the same kind of help. Another 9 percent of the teachers said that they provide the child with individual materials or procedures which she/he could use within the large group activities. Sixteen percent of the teachers felt that they could not describe their most commonly used approach to individualization. The process of individualizing activities for children is generally assumed to require time for staff to talk with one another about the children. Fifty-eight percent of the teachers said that they have a regularly scheduled time for consulting with other staff; while that is a large proportion of teachers, it also means that 42 percent of the teachers do not have a regularly scheduled time for such activity [Table TI-33b].

Teachers were also asked what methods they use at the beginning of the school year to discover the developmental level of each child in the classroom and to be able to deal with each child's individual needs. As shown in Table TI-79, the methods most often used by teachers were informal observation, and administering diagnostic measures (58 percent and 56 percent, respectively). Also used often were discussion with parents and informal assessment devices (the diagnostic measures and informal assessment devices are discussed in the tangible resources portion of the curriculum discussion, which follows). Less

often used methods were discussion with program staff, administering criterion referenced checklists, references for formal testing, and looking at a child's records (9 percent, 6 percent, 6 percent and 4 percent, respectively).

As was discussed in the preceeding section, classroom observers noted the presence or absence of specific behaviors during the classroom observation day. In some cases, the "yes" score indicated the observer's general impression of a teacher's behavior and purposes during the period of observation. Note that one of the relatively few items on which we felt the percentage of "yes" scores was disappointingly low was the item on individualization, "Did the teacher individualize most children's experiences?" (42 percent yes). [See Appendix F, ACES-Teacher Behavior Table 2.]

Language spoken. Since many Head Start children speak a first language other than English, it is important to know what languages teachers speak in their Head Start classrooms. One hundred percent of the teachers interviewed use English in their classrooms; nine percent of those interviewed also use Spanish; and six percent use another language (other than Spanish, American Indian, or Oriental) [Table TI-20].

Instructional behaviors. In an initial attempt to discover what categorization of instructional behaviors will be useful in investigating the relationship between this group of process variables and child outcomes, we asked observers to keep track, during the time sampling portion of their observation, of the particular instructional behaviors which they observed. The categories which we used during this data collection period were: direction giving, informational questioning, lecturing/story telling, and assisting/demonstrating. Using this categorization system, we found that the most commonly-observed type of instructional behavior was Direction Giving.

Teachers in the observed classrooms spent an average of 48 percent of their time giving directions. The other categories of instructional behaviors which were found to occur, in order of declining frequency, were: Assisting/Demonstrating, Informational Questioning, and Lecturing/Story Telling (as seen below in Table 3.18, or more extensively in Tables ACES-8A through 8G).

Table 3.18

Percentage of Time Spent on Four Categories of Instructional Behaviors
(N = 55 classrooms)

Instructional Behaviors	Percent of Time Spent (N=54 classes)		Percent of Total 15-Minute Periods in Which the Category of behavior was observed
	Mean	Range	
Direction Giving	48	14-87	83
Informational Questioning	15	0-50	37
Lecturing/Story Telling	4	0-23	10
Assisting/Demonstrating	25	3-58	54

Supervision. Supervision which the teachers receive in Head Start is also seen as being a portion of the intangible curriculum. According to the center directors interviewed, a weekly visit to the teacher's classes is the most common form of supervision of the Head Start teachers (40 percent) [Table CDI-53]. Twenty-seven percent of the center directors said that there are daily visits to the teacher's classroom for supervision; 17 percent that monthly classroom visits is the method used, while only 3 percent of the center directors said that classroom visiting for purposes of supervision takes as seldom as twice a year. Supervisory visits are most often arranged on an as-needed basis (according to 70 percent of the center directors), while 30 percent of the center directors say that they use regularly scheduled visits [Table CDI-54].

According to the teachers interviewed, most of them perceive that their immediate supervisor is the education coordinator (40 percent of the teachers). A total of 22 percent of the teachers are supervised by program or center directors. The remaining teachers have a wide variety of other supervisors. In addition, the teachers interviewed indicated that they are responsible for supervising an average of three other individuals within the Head Start program [Tables TI-23b and TI-23c].

Curriculum: Tangible Resources

For a description of the tangible resources available to teachers, children and parents in Head Start, NTS staff members interviewed center directors and teachers and completed the Tangible Resources Checklist portion of the ACES observation system.

Curriculum guides and materials. Center directors and teachers were shown a list of commonly used resource materials and curriculum guides designed for the early childhood level and asked which, if any, of these they used in their centers or classrooms. In addition, we asked them what other materials they used, including materials that they had developed for themselves. This list of materials and the numbers of centers and classrooms which use them can be seen in Tables CDI-59 and TI-65. Not surprisingly, 100 percent of the center directors said that they use materials in their centers which have been developed by their own staff. In addition, 50 percent of all centers reported that they use the Peabody Language Development Kit. The only other commercial curriculum materials used by ten percent or more of the centers were GOAL: Language Development (10 percent); the Learning Accomplishment Profile and Curriculum Activities (13 percent); and the Portage Project Materials (17 percent) [Table CDI-59]. Teachers were asked to respond to the same list of materials. Twenty-four percent of the teachers reported that they use their own

curriculum materials; 29 percent of the teachers report using the Peabody Language Development Kit; other materials used by at least ten percent of the teachers were: An Activities Handbook for Teachers of Young Children (15 percent) and the Learning Accomplishment Profile (13 percent) [Table TI-65].

Teachers were asked what diagnostic measures they use with children in their classrooms; 30 percent reported using the Learning Accomplishment Profile and 18 percent the Denver Developmental Screening Test [Table TI-80]. All other measures reported used by teachers were each used by less than 10 percent of the teachers. Ninety-six percent of the teachers interviewed said that they assessed the developmental progress of the children in their classrooms during the program year [Table TI-81]. Measures which the teachers reported using for this purpose included the Learning Accomplishment Profile (19 percent), the Denver Developmental Screening Test (11 percent), the Portage Guide to Early Education (9 percent), the Peabody Picture Vocabulary Test (8 percent), and the Santa Clara Inventory of Development (4 percent) [Table TI-82].

The 119 items in the Tangible Resources Checklist portion of the ACES observation system were completed by the classroom observer. Each item on the Checklist indicates the presence or absence of a tangible resource, for example facilities, equipment, or materials in the classroom or the center. As with the items of the Teacher Behavior Checklist discussed above, these items have been grouped under the functional areas of the Child Development Associate Training System and are reported in Appendix F, in the ACES, Tangible Resources, Tables 1 through 8, and are summarized in Table 3.19, below. It is interesting to note that while the overall average percent of items marked "yes" in the Tangible Resources Checklist is similar to the percent in the Teacher Behavior Checklist (67 percent compared to 62 percent; see Tables 3.19 and 3.16), the individual functional areas show a rather different pattern in Tangible Resources than in

Teacher Behavior. The final area on the Tangible Resources Checklist is Environment, which did not appear on the Teacher Checklist, and therefore, cannot be compared. It did, however, have the highest percent score on Tangible Resources and contains such items as "Was the emotional environment pleasant, supportive, personalized?" Comparing areas that appear in both scales, group management items again have a relatively high percent of "yes" scores. Note, however, that some of the areas which received higher scores in Teacher Behavior (Self-concept and Physical Competence) received relatively low scores in Tangible Resources (53 percent and 48 percent, respectively). In addition, three areas which were relatively low on the Teacher Behavior Checklist (Cognitive and Language Competence, Health, and Creative Competence) were relatively higher in Tangible Resources (73 percent, 70 percent, and 62 percent, respectively). The reader is referred to the section above on the Teacher Behavior Checklist for discussion of the tentativeness of any interpretation of

Table 3.19

Average Number of Items Marked "Present" on
Tangible Resources Checklist
(N = 54 classrooms)

<u>CDA Functional Area</u>	<u>Number of Items</u>	<u>Average Score Classroom</u>	<u>Average Score in Percent of Items</u>
Self Concept	8	4.2	53%
Cognitive and Language Competence	3	2.2	73%
Physical Competence	18	8.7	48%
Health	30	21.1	70%
Safety	26	18.3	70%
Group Management	12	9.4	78%
Creative Competence	16	10.0	62%
Environment*	6	5.5	92%
TOTAL	119	79.4	67%

*To calculate score, three items had to be reversed from positive to negative.

the item and scale scores on these checklists. It is interesting to note, however, for Tangible Resources as well as for the Teacher Behavior Checklist above, that there are a small number of items for which the percentage of "yes" responses appears to be low in regard to the ACYF expectations for those items. Those items are listed in Table 3.20 below.

Table 3.20

Tangible Resources Checklist Items for Which
the Percent "Yes" Scores Appear to be Low
(N = 54 classrooms)

<u>Item</u>	<u>Percent "Yes"*</u>	<u>CDA Functional Area</u>
Was there sand to be in (box or area)?	43%	Physical Competence
Did all electrical outlets (within reach) have caps or covers?	40%	Safety
Was a gate present at top and bottom of all stairs?	2%	Safety
Were there any small, private areas where a child could be alone?	49%	Group Management

*The percentages found for these four items during the performance indicator effort in 1979 were 51, 46, 10, and 64 percent, respectively. See note for Table 3.17.

The Parent Involvement Component of the Head Start Program

Taking into account the children living with both parents, a single parent, or other relative, the centers in this study have an average of 139 parents available for the parent involvement portion of their programs (with a range from 27 to 870 parents). In an average center, 62 percent of the parents participate in Head Start activities (for example, attend meetings, go on field trips, or visit the classroom), with a range in number from 5 to 397 parents [Table CDI-63]. Center directors were asked about the frequency with which the

parents participated in the Head Start activities. In the average center, approximately 13 parents participate in Head Start almost daily, approximately 22 participate at least weekly, and approximately 31 participate at least monthly [Table CDI-64]. The majority of the adults who participate in parent involvement activities in Head Start are women (86 percent) [Table CDI-65].

Parent -Teacher contact. As this study progresses, parents themselves will be asked in interviews about their participation in Head Start activities. During the site visits which have taken place, however, interviews have not included parents and thus the data in this section is that which was reported by program staff members. Twenty-two percent of the teachers interviewed reported having a regularly scheduled time for talking with the parents individually at the centers, and 80 percent of the teachers reported having a regularly scheduled time for attending parent meetings [Table TI-33b].

Parent classes and workshop. Ninety percent of the centers conduct workshops or classes especially for parents, and 72 percent of the centers visited had held a parent workshop or class within the previous month [Tables

Table 3.21

Topics Discussed at Parent Training Sessions
(N = 29 programs)

<u>Topics</u>	<u>Percent of Programs</u>
Emotional Development	45
Cognitive/Intellectual Development	45
Teaching Activities for the Home	59
Language Development	41
Physical Development	48
Health and Health Care	66
Nutrition	59
Handicapping Conditions	48
Community Involvement	41
Other	78

CDI-68 and CDI-69]. The average number of such parent sessions held during the previous month by each center was 5 (with a range from 1 to 30). The number of parents who attended these parent sessions in the previous month averaged 39, with a range from 4 to 194 [Table CDI-72]. The variety of topics with which the parent training sessions dealt in the Head Start programs was impressive, as can be seen in Table 3.21, above [from Table CDI-74a].

Home visits. Since home visits figure prominently in Head Start programs, portions of both the Center and Teacher Interviews were devoted to this subject. As seen in Table 3.22 below, sixty-four percent of the teachers interviewed have a regularly scheduled time for making home visits, while only 2 percent of the teachers interviewed reported never making home visits [from Tables TI-33b and TI-34]. Thirty-seven percent of the teachers make home visits at least every two months; while 62 percent make visits less often than every two months.

Table 3.22

Frequency of Home Visits and Accompanying Materials for Parents
(N = 55 teachers)

	Percent of Teachers Interviewed
Have a Regularly Scheduled Time for Home Visits	64
Frequency of Home Visits	
Never	2
Weekly	4
At least monthly	15
At least every two months	18
Less than every two months	62
Frequency of Providing Materials During Visit	
Never	30
Every visit	26
Every second visit	28
Less often	17

Seventy percent of the teachers interviewed reported leaving books or other materials with the parents during their home visits. Seventy-six percent of these teachers leave such materials at least every other visit. Of the teachers who reported leaving books or materials with the parents, 100 percent report that they explained to the parents how to use the materials left with them [Tables TI-36 and TI-37].

Lending libraries. Forty-eight percent of the center directors interviewed reported having lending libraries which parents can use; and in those centers with lending libraries, an average of 7 parents use the lending library each week [Tables CDI-91 and CDI-92]. A wide range of materials are available in these lending libraries including books on parenting skills, children's books, puzzles, games, cookbooks, toys, filmstrips and projectors, records, record players, and educational kits [Table CDI-94]. In addition, 92 percent of the center directors said that their programs had developed methods to encourage parents to work at home with their children in teaching the basic skills [Table CDI-95].

Policy Councils. The Head Start Policy Council is an important element of every Head Start program and is a critical part of parent involvement. The Policy Council in 90 percent of the Head Start programs visited meets every month [Table CDI-85]. An average of 14 parents (ranging from 1 to 50) had attended the most recent Policy Council meeting. Individuals other than parents also attend the Policy Council meetings. The most common non-parents present at the meetings include program directors, parent coordinators, and teachers [Tables CDI-86 and CDI-87]. In most cases, the reported role of the non-parents at the Policy Council meetings was to observe (52 percent of the centers) and/or to serve as advisors (76 percent), rather than to conduct the meetings (10

percent) or serve on committees (17 percent) [Table CDI-94]. The Policy Council tends to be involved in decision-making regarding areas of the Head Start program, including staff issues, budget issues, curriculum questions, services and activities for children and services and activities for parents [Tables CDI-89 and CDI-90].

Parents in the classrooms. Parent participation in the classroom is a key element of the parent involvement component of Head Start. Fifty-six percent of the programs reported that parents can visit their classrooms both on a scheduled and on an unscheduled basis [Table CDI-66]. In 17 percent of the programs visits are on a scheduled basis and in another 17 percent the visits are generally unscheduled. Once in the classroom, the parent participates in the classroom activities in a number of different ways. The activities in which parents participate, according to center directors, are reported in Table CDI-67, and are listed in Table 3.23 below, with the percentage of centers in which parents are reported to participate in each of the activities.

Table 3.23

Activities in which Parents Participate in the Head Start Classroom
(N = 29 centers)

<u>Activity</u>	<u>Percentage of Centers Reported</u>
Supervise Free Play	31
Read to the Children	48
Help with Art Projects	28
Set up Materials for the Teacher (such as snacks, art materials, etc.)	52
Help with Field Trips	31
Teach Their Own Child	14
Teach Other Children in Group or One-to-one Situations	41
Supervise Snacks	34
Clean-up	28
Other Activities	61

As can be seen from the above list, while many parents' contributions to the classroom are in the area of caretaking, for many other parents the involvement is directly with the children in learning situations.

Continuity of the Head Start Program with Local Elementary Schools

Because the continuity of a child's educational experiences during the early childhood years is of considerable importance to ACYF, a portion of the interview with the center director dealt with the relationship between the Head Start program and the local elementary schools. There appears to be a sharing relationship between almost all of the programs and their respective local elementary schools. Fifty-eight percent of the Head Start Center Directors reported sharing the use of buildings with the public schools; and 51 percent reported sharing of administrative personnel [Table CDI-24]. Forty-four percent report using consultants from the public school system and 34 percent share a transportation system. Only 14 percent share teachers and 10 percent share supervisors. Of those who share teachers, the public school teachers provide service to the Head Start programs on a less-than-weekly basis in most cases (97 percent); and the supervisors visit the Head Start programs less than weekly (96 percent of the centers) [Tables CDI-25a and 25b]. Nearly all of the centers reported some special Head Start activities which were designed specifically for preparing the children for elementary schools [Table CDI-27]. The activities which were reported by the center directors are listed in Table 3.24, along with the percent of the centers where each occurs [from Table CDI-27]. Notice that, while there is a wide variety of such activities, those activities occurring in the most centers are those which have little to do with an exchange with elementary schools. The most "popular" preparations for elementary school appear to depend on the Head Start teacher or program's perception of skills needed in school.

Table 3.24

Head Start Activities Which Prepare Children for Elementary School
(N = 29 centers)

<u>Activity</u>	<u>Percent of centers</u>
Public School teachers attend training with Head Start teachers	20%
Public School teachers visit Head Start classrooms	24%
Head Start parents visit public schools	41%
Head Start children regularly visit public schools	17%
Head Start children visit public schools just prior to enrollment	44%
Head Start children role playing public school attendance	44%
Emphasis on academic skills development	78%
Emphasis on social skills development	82%
Teaching children to follow directions and understand rules	58%

Fortunately, most of the Head Start programs appear to have a good to excellent relationship with their local public schools, in the opinion of center directors. Fifty-nine percent of the center directors said that their relationship was good; and 10 percent said that the relationship was excellent. The remaining programs and schools have relationships that are fair (7 percent), difficult (10 percent), or non-existent (10 percent) [Table CDI-28].

Opportunity to Benefit

In this chapter we have been describing the process data which were gathered while visiting the Head Start programs in the evaluation. The previous sections, which focus on the variables in the first two components of the conceptual framework, described the "determinants" of the program process and the "process" itself, at the classroom level. This final section looks at the program as experienced at the individual child's level.

The data in this section are not extensive. At the time of the site visits, no children were yet identified who would be participating in the longitudinal evaluation. Preliminary measures of a "child's exposure to the program" were tried out during the classroom observations on only a small number of children, up to five per classroom observed.

The major variables in this component which we have attempted to measure thus far are: group size, individual time spent on activities, and the level at which the child is engaged in an activity.

At the beginning of the classroom observation, the observer randomly chose 5 children from the class rosters to observe. Thus, in addition to recording information about the entire class every 15 minutes, the observer also recorded information about five target children at the same time intervals. In the 54 classrooms observed, there were a total of 265 target children. Most of these were four and five-year olds. (Fifty-two percent were four-year-olds; thirty-two percent five-year-olds; eight percent three-year-olds; and five percent six-year olds [Table ACES-1].)

Group Size. During observation the target children spent most of their time (65 percent) in a group which was composed of the entire class [Table 3.25 below and Table ACES-6A]; but they also spent fully one-fourth of their time in

Table 3.25

Percent of Time Spent in Three Group Sizes/Target Children
(N=265)

Group Size	Percentage of Time	
	Mean	Range
Entire Class (average size = 17 children)	65	8-100
Large Group (8 or more children)	11	0-55
Small Group (7 or fewer children)	25	0-92

small groups (7 or fewer children). The time spent in these small groups is of considerable interest since positive effects of small groups were found in the National Day Care Study.⁵ When we consider that certain activities commonly occur only in entire-class groups (for example, transition, meals, naps), the time spent in small groups appears substantial.

Level of Engagement. At the end of each fifteen-minute observation period, the observer noted the level at which s/he judged each child to be "engaged" in the ongoing activity for that child. Possible ratings were minimal, moderate, or extensive engagement. "Extensive engagement" indicates that the child is engrossed in the activity. "Moderate" means that s/he is paying attention to the activity and participating, but could not be said to be engrossed. A child who is minimally engaged is paying little or no attention to the activity in which s/he appears to be participating. The average child score for level of engagement across a full classroom day was 2.15, or slightly more than "moderate engagement," with a standard deviation of .35.

⁵ Abt Associates, 1979.

Group size and engagement. If we can assume that a high level of engagement is desirable for child outcomes,⁶ then the best group size (most conducive to extensive engagement) is Small Group. The correlation of Small Group with level of engagement is .17, significant at less than the .01 probability level. On the other hand, the group size defined as Entire Class is strongly and negatively associated with level of engagement ($r = -.26$; $p < .01$). Large Group is nonsignificantly correlated with engagement. [See Table ACES-6B.] This relationship between group size and engagement further underlines the importance of the above finding about the amount of time that Head Start children spend in groups of different sizes.

⁶This relationship can be investigated when both exposure and outcome variables are measured for a single group of children.

CHAPTER 4

RELATIONSHIP OF THE CURRENT DATA TO THE LONGITUDINAL EVALUATION

Viewing the data reported in the preceeding chapters as being representative of the Head Start programs and of the Head Start children across the country, the value of that data is enormous. On a descriptive level, it presents a richer picture of the Head Start program-in-operation than is currently compiled in a volume such as this. The data will also lead to a preliminary correlational study of the relationships among three large categories of variables which have now been measured for this randomly selected group of programs: determinants of how the programs are implemented, the program process, and the individual child's participation in the process.

There are two major justifications for treating this body of information as being descriptive of the whole of the Head Start program. First, the programs in the study were randomly selected from the universe of Head Start programs in a manner carefully designed so that the programs would be representative of those attended by all Head Start children (see Chapter 2). Thus, the information about those selected programs can be assumed to represent the universe of Head Start programs. Second, on a small number of variables, we were able to compare this sample with information collected on the vast majority of Head Start programs (again, see Chapter 2). Even though the size of this sample of programs is less than two percent of the Head Start programs nationwide, it appears to be remarkably representative of those programs.

The gathering of the process data presented in this report has served several purposes: description, piloting of measures, piloting of procedures, and preparation for the longitudinal evaluation. First, as pointed out above, the data give us a rich description of Head Start programs.

The second objective of this data collection was to pilot a group of measurement instruments so that they could be revised and refined. These interview and observation instruments will eventually be used repeatedly in the course of an evaluation which will follow three cohorts of children from pre-school through the elementary school years.

In addition to piloting the measures, data collectors were also piloting a number of procedures for obtaining information about programs, staff, children, parents, and processes. These procedures include: identification of the appropriate person or staff-role for answering each question, identification of the proper observation procedures to cause the least disruption to classrooms, and methods of handling and coding the information received for analysis purposes.

Finally, through the process of gathering this body of information about programs, measures, and procedures, the evaluation staff was able to lay the groundwork for the longitudinal evaluation. Data collectors were also information givers. They explained the purposes and procedures of the evaluation and helped to cultivate positive attitudes toward it. They tailored their explanations to fit the individuality of each program and each program's concerns. In some cases, the evaluation itself was tailored to accommodate differences in programs and the families served. The result is that 28 of the original 30 programs selected for the evaluation continue to be willing collaborators in this study. In the fall of 1979, 28 individual field studies, basically similar in design, were launched with the entry of more than 1100 children and families into the longitudinal evaluation.

Highlights of the Process Data Report

It is difficult to summarize for this chapter the data reported in the previous sections of this report in any meaningful way. We have attempted to organize and cross-reference the report in such a way that the reader can easily access the information. We would like, however, to highlight a few of the findings which have relevance for policy decisions about Head Start.

Children and staff. Head Start programs are providing services to a vast group of children (more than 800,000) from a wide variety of ethnic and community backgrounds, but 83 percent of the programs are not funded sufficiently to serve all eligible applicants. The ethnic distribution of Head Start staff members corresponds closely to that of the children served. This is true at both the program level and the classroom level.

The staff of the Head Start programs tend to be quite highly educated (36 percent have Bachelor's degrees, and an additional 16 percent have Master's degrees), although only 4 percent have achieved CDA certification. The staff members have been working with their Head Start programs for an average of 5 years.

There is a high degree of consensus among teachers toward a particular teaching approach, one described as "developmentally sequenced activities, with emphasis on individual children." In addition, teachers and center directors agree in their selection of priority goals: Self-Esteem Development and Group and Social Skills. Teacher behavior scores on an observation checklist confirmed that teachers emphasize these goals in practice as well as in theory.

In the classroom. Based on observation of classroom activities, Head Start children spend an average of 33 minutes of each classroom day in cognitive/academic activities, 56 minutes in free play, and 15 minutes in directed play.

One of the major differences between part-day and full-day programs is that the full-day programs spend 17 minutes more in cognitive activities each day.

Group size is a variable of considerable policy relevance, in light of recent findings from the National Day Care Study showing the positive effects of small groups on child development (Abt Associates, 1979). The data reported here confirm the importance of group size; being in small groups (seven or fewer children) was conducive of high child attention or "engagement" in activities; being in an "entire class" group was detrimental to child engagement in activities. Further, Head Start children spend fully one-quarter of their classroom day in small group activities.

Parents. One of the most striking results gained from interviewing 55 teachers in the 29 programs visited is how strongly supportive teachers are of the parent's continuing participation in the education of the child. And when parents are present in the Head Start classrooms, large numbers of them are engaged in reading to children and in teaching children on a one-to-one basis.

Head Start and the schools. Head Start directors view their programs as having a role in preparing children for elementary school. Many arrange visits for Head Start children to the schools, and most emphasize social skills, academic skills, and rule following in a conscious effort to enhance children's readiness for school.

Most Head Start programs are developing communication and relationships with local elementary schools. Seventy-nine percent of the programs arrange for Head Start and school staff to talk to one another about individual children, and more than half discuss curriculum issues jointly.

Future Phases of the Evaluation

NTS has laid a foundation for the continuation of this evaluation. A conceptual framework has been developed that provides a means of integrating the

many questions being investigated; data collection instruments have been developed for all components of the conceptual framework; data collection and management procedures have been refined to insure quality data; descriptive process data has been collected; and excellent rapport has been established with the 28 programs currently in the study. All of this has been accomplished in the first 15 months of the evaluation.

Definite recommendations for future phases of the evaluation have emerged from the experiences thus far. NTS has greatly increased the body of knowledge available on local program operation, enabling ACYF and the evaluator to better tailor the evaluation design to the realities of individual program characteristics. Such issues as timing of recruitment, selection, and enrollment; number of children available; and transportation problems; can now be anticipated and appropriate measures taken to avoid difficulties. We can pinpoint those characteristics of program operation which are amenable to change. Finally, and perhaps most important, considerable experience has been gained in the most effective methods of implementing random assignment in a real-world setting.

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